KING COUNTY
STATE OF WASHINGTON

Fifth Annual Report

of the

County Road Engineer

1939

State Golden Jubilee

to the

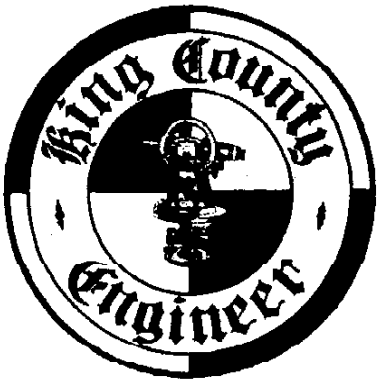
BOARD OF COUNTY COMMISSIONERS

JACK TAYLOR
Commissioner Second District
Chairman

TOM SMITH
Commissioner Third District

RUSSELL H. FLUENT
Commissioner First District

H. H. SISLER
County Road Engineer


King County
Engineer

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FIFTH ANNUAL REPORT

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COUNTY ROAD ENGINEER

1939

STATE GOLDEN JUBILEE

Compiled under the direction of

H. H. SISLER
County Road Engineer

by

HAROLD LAUFER
Chief Clerk

LITHO. IN U.S.A.

GOLDEN JUBILEE

of the

STATE OF WASHINGTON

1889-1939

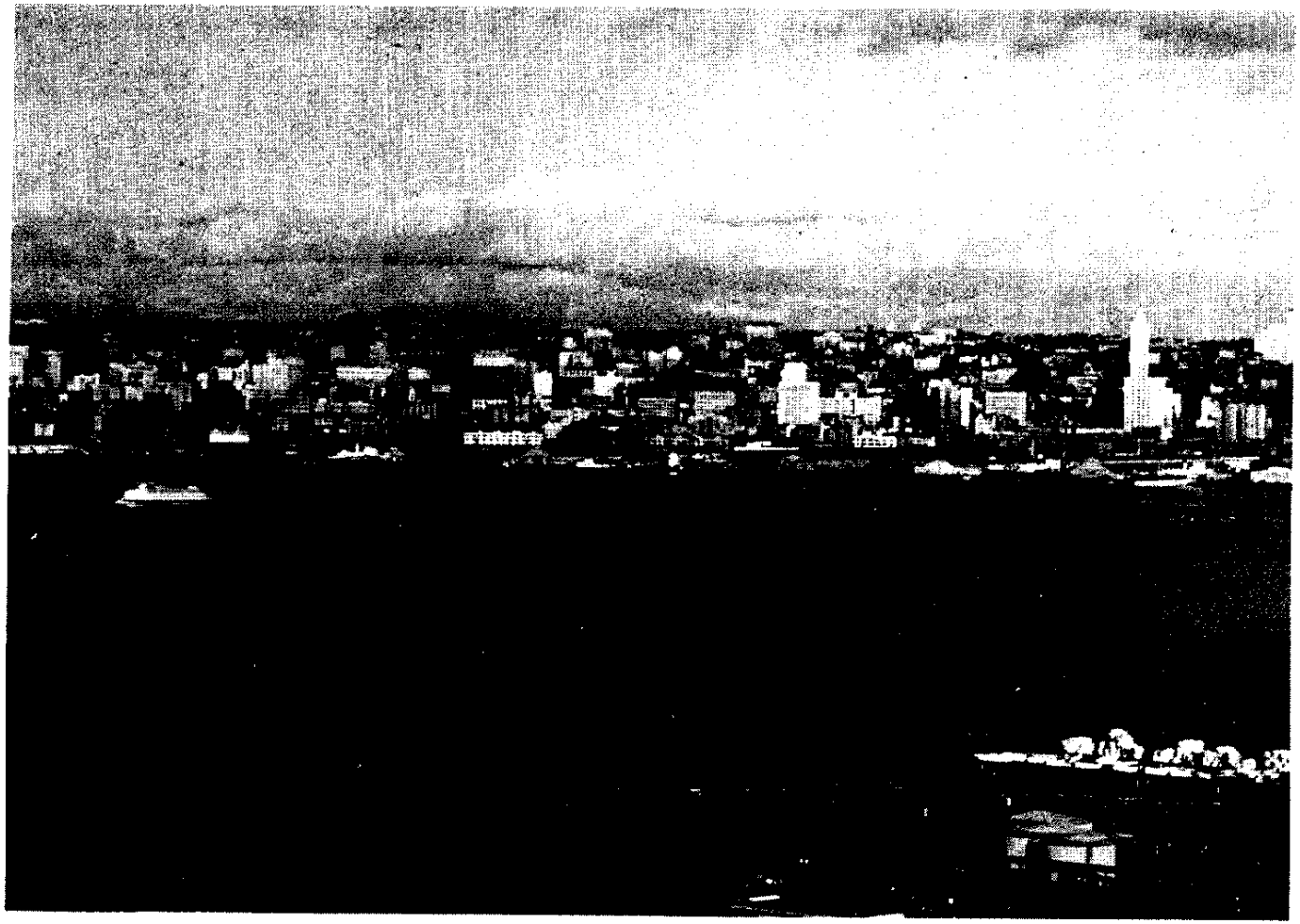
After fifty years of statehood, it seems only fitting as a contribution to this Golden Jubilee Year to review in a brief way not only the progress made during that period, but to trace the development of Seattle and King County from the earliest days to the present, especially in the activities having a bearing on the county engineer's functions. The early pioneers performed a monumental work, and on the foundation that they built has arisen the magnificent City of Seattle, the largest in King County, in the State of Washington, and, for its age, in the entire country.

Information and statistics appearing in this report have been obtained from these sources:

Records of the King County Engineer's Office
Proceedings of the King County Commissioners (1853-1939)
King County Auditor's Reports (1894-1939)
Miscellaneous Records and Vouchers in the King County Auditor's Vault (1853-1894)
Miscellaneous Records in the King County Treasurer's Office
Session of Laws of Washington (1854-1939)
Bagley's "History of Seattle" (to 1916)
Prosch's "History of Seattle" (1850-1897)
Bagley's "History of King County" (to 1929)
Denny's "Pioneer Days on Puget Sound" (to 1880)
Sayre's "This City of Ours" (to 1936)

Thanks are due the employees of the Seattle Municipal Reference Library branch of the Seattle Public Library, who helped prepare much of the information concerning population, annexations to the City of Seattle, and the list of County Surveyors and Engineers.

Through the courtesy of Mr. Cecil C. Bagley, son of the author of Bagley's histories of Seattle and of King County, many photographs appearing in this report have been reproduced.



SKYLINE OF SEATTLE

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Office of
King County Engineer
State of Washington
Seattle

Harry H. Sisler
County Road Engineer

May 1, 1940

To the Honorable Board of
King County Commissioners,
Seattle, Washington.

Gentlemen:

I have the honor to submit herewith the fifth annual report of the County Road Engineer for the period January 1st to December 31st, 1939.

Inasmuch as the year just passed witnessed the Golden Jubilee of Washington as a state, it was felt that this annual report should be in the nature of a jubilee document, and it is hoped that a review of the historical background and the engineering accomplishments since the first settlement of this territory in 1852 will serve this purpose.

In road activities and other matters relating to the functions of this office, there has been a perceptible decrease in the work performed. This has been due partly to the reduced amounts available from the motor vehicle fund, and in part to the curtailment of the federal contribution in the form of W.P.A. and P.W.A. aid.

This, as you know, necessitated a decrease in personnel with a consequent reorganization of this office, but notwithstanding the circumstances, the work was carried on smoothly throughout 1939, due largely to the very splendid cooperation of your Honorable Body, the road districts, and the staff of this department, which is deeply appreciated.

Respectfully submitted,

H. H. Sisler

H . H . S I S L E R
COUNTY ROAD ENGINEER

TOM SMITH
Commissioner 3rd Ditsrict

JACK TAYLOR
Commissioner 2nd District
Chairman

RUSSELL H. FLUENT
Commissioner 1st District

BOARD OF KING COUNTY COMMISSIONERS

LACEY V. MURROW
State
Director of Highways

H. H. SISLER
County
Road Engineer

COMMISSIONERS' COMMENTS

MR. JACK TAYLOR,

Commissioner, South District,
Chairman of the Board.

Since the start of my administration the tremendous growth of population in the suburbs has been continuous, placing upon the county road fund in my district an increasing demand for better transportation facilities. The past year saw the continuation of the general road betterment program. Many fine improvements were completed during this year, including the Foster Avenue Bridge and a number of smaller structures which had been rapidly reaching a stage of deterioration.

The road reconstruction program involved the completion of many miles of widening, straightening and ditching the heavier traveled highways and the construction of pedestrian walks. Such centers of population as White Center, Des Moines, Bryn Mawr, Riverton, Duwamish, Arbor Heights, received a great amount of attention from the road personnel. Adding to my original program to take the South District "Out of the Dust" I am happy to report approximately 35% of the mileage of roads in my district has received dust palliative and oiling treatment.

The river improvement employees in my district have completed many worthwhile river and drainage projects including work on the Cedar and Green Rivers and their tributaries, and drainage streams and ditches.

In 1939, too, began a plan by the Board of County Commissioners, especially Road Commissioner Tom Smith and myself, to place the county road crews on a monthly salary basis, which will increase their efficiency and lead to stabilization of employment.

Citizens of the South District may rest assured that my last year as Commissioner will see many fine road improvements carried to a successful conclusion.

MR. TOM SMITH,

Commissioner, North District.

The year 1939 in Road District No. 3 saw the completion of many fine improvements, included in which is the widening of Holman Roads Nos. 1 and 2 and Greenwood Avenue, making a four-lane highway from the City Limits at 15th N. W., and West 85th Street, to a connection with the Pacific Highway, U. S. No. 99, at North 155th Street. This work was planned and carried out in connection and cooperation with the P. W. A., at a combined expense of approximately $115,000, King County's share being about $65,000. The project was conceived in recognition of the fact that when the Ballard Bridge improvement, (then under contemplation by the City of Seattle), was completed, substantial traffic would flow over it from the wholesale and waterfront district through the Holman Roads and Greenwood Avenue to points north.

Other major construction items included a continuation of the extensive program of W. P. A. projects for the improvement of residential and arterial streets throughout the North District. A normal amount of road oiling and surfacing was carried through, and at the end of the year the physical condition of the roads throughout the district was such as to permit your commissioner to take considerable pride in the accomplishments of the year 1939. The public generally approved the program undertaken by the district and many commendatory expressions were received from citizens and from community clubs throughout the area served.

Especially important in the view of the commissioner and others interested in flood control was the completion of the dredging and rock rip rapping program on the Raging River at Fall City. This project, which it is felt has completely eliminated the possibility of future trouble at this point, has been recognized by competent engineers as being an outstanding example of proper flood control procedure.

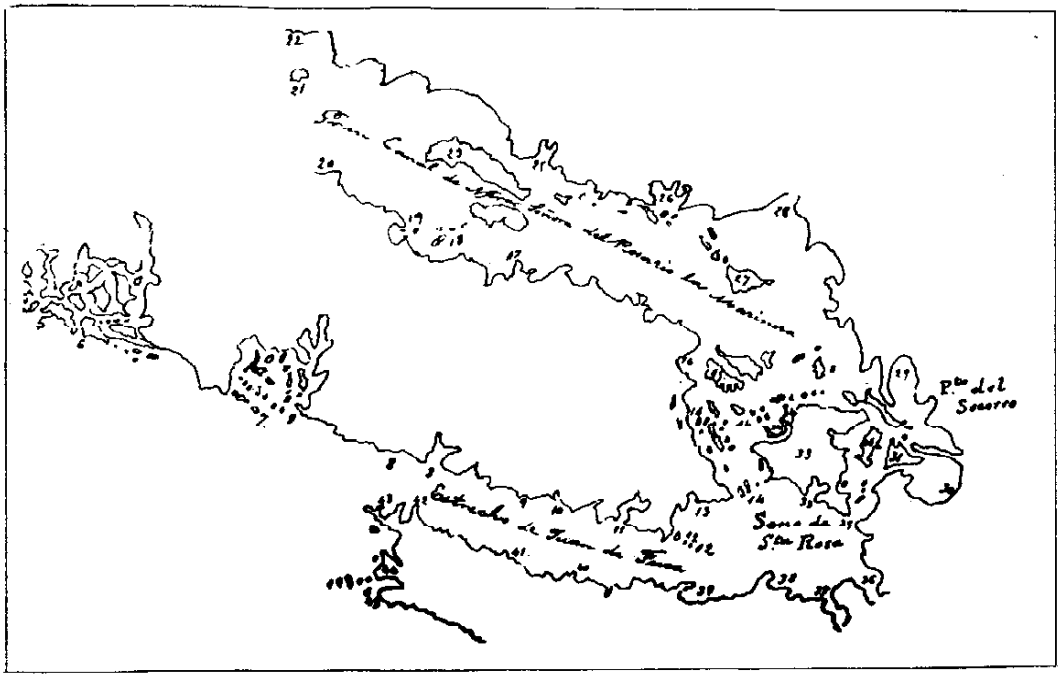
Your commissioner is gratified and pleased to express his appreciation of the cooperation of all of the county forces engaged in this work during the year 1939, and to assure the public that the future will see a continuation of the policies responsible for these accomplishments.

MR. RUSSELL H. FLUENT,

Commissioner, First District.

In the last few years a great deal of tax title real estate has accumulated in the possession of King County, which has lain dormant with no concentration of efforts to push the sale of these parcels and place them back on the tax rolls. A sizeable proportion of this property was located in outlying districts, many of them not served by any means of communication whatsoever, and the work done by the county engineer's office, also in conjunction with the W.P.A., has tended to open up these districts, adding greatly to the real estate values of King County generally and making otherwise unsalable property very desirable.

Since taking office, realizing the importance of liquidating King County owned real estate as quickly as possible, I have established a separate Property Department. Under my guidance, sales have been accelerated and have produced a revenue of $1,262,917.00 in 1939, with much more than this amount in prospect for many years to come. Sales of such properties have resulted in new homes being built, thus increasing their tax value, and these values and the revenue produced have more than offset the cost of the engineering involved.



MAP SHOWING EXPLORATION OF SPANIARDS, PRIOR TO 1792

DISCOVERY AND EXPLORATION OF THE PACIFIC NORTHWEST

The North Pacific Coast region known by the Spaniards as Alta California, was called New Albion by Captain Frances Drake, New Georgia by Captain George Vancouver, and later New Caledonia. In the United States, the name Oregon was in use for all territory from the summit of the Rocky Mountains to the Pacific Ocean and from California to Russian America. By treaty of June 15, 1846, the northern international boundary was determined, and thereafter territory north of the Columbia River to this boundary was called Northern Oregon, until the creation of Washington Territory in 1853.

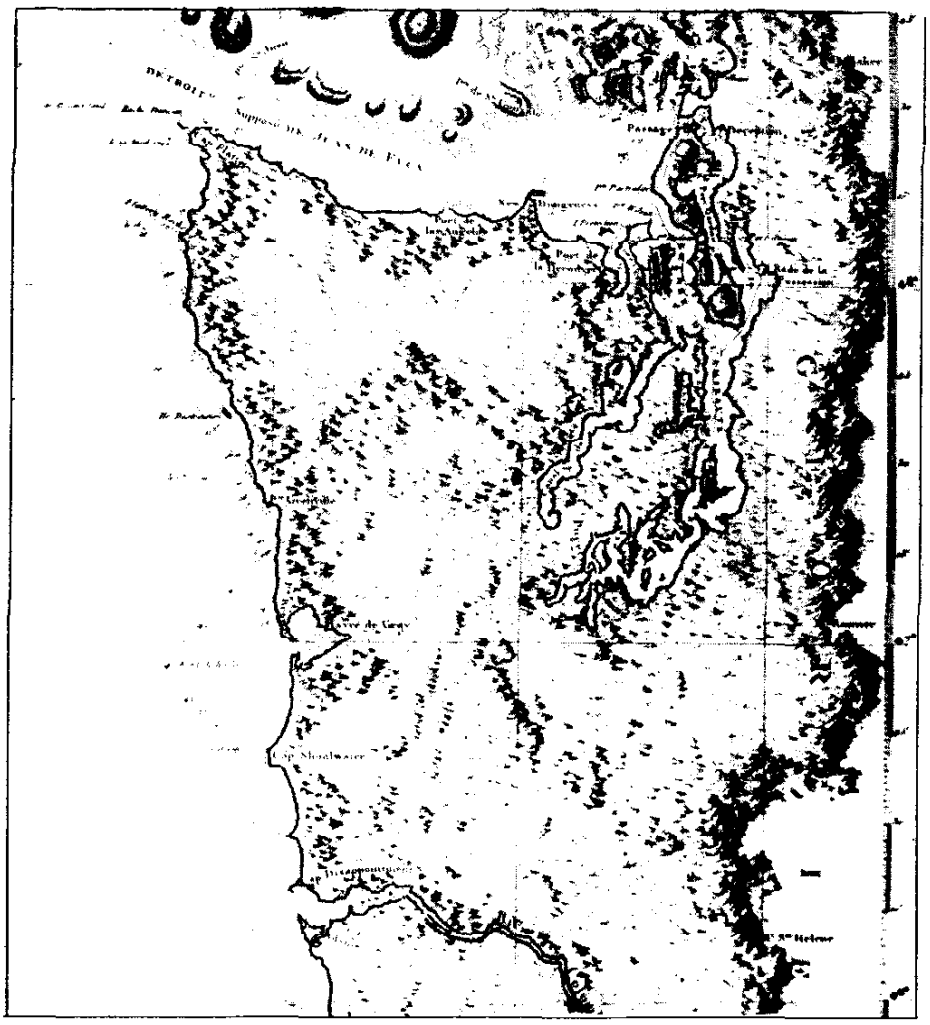
Although Francis Drake, sailing for England on a voyage round the world, entered either the Bay of San Francisco or of Bodega to refit and provision his vessel, there is no assurance that he sailed north, and the first discoverer of the Pacific Northwest is therefore reputed to have been Apostolos Valerianos, (otherwise known as Juan de Fuca), a Greek navigator in the service of the Viceroy of Mexico, who in 1592 negotiated the straits which bear his name. Exploration of the California Coast continued and it was in 1775 that a Spanish expedition under Captain Bruno Heceta sailed as far north as Alaska. This was followed in 1778 by the voyage of Captain James Cook of the British Navy, who reached Nootka Sound on Vancouver Island, naming Cape Flattery on the way. In 1787 Captain Barclay, representing British interests, discovered Barclay Sound, and his wife who sailed with him thus became the first white woman to enter the Pacific Northwest. The next year witnessed a voyage by Captain John Meares, a British navigator, who was the first to sight and name the great inlet "Juan de Fuca," who discovered Willapa Harbor, and who named Cape Disappointment, Deception Bay, Mount Olympus, etc. At Nootka he established a temporary settlement consisting of Chinese and Hawaiians, which the Spaniards contested, but in 1790 they were compelled to recognize the transfer of these lands to England. From then on, until permanent settlements were made, further explorations by the Spaniards were undertaken in 1790, 1791, 1792, resulting in the many Spanish names for their discoveries, such as Port Angeles, Camano Island, San Juan Archipelago, Fidalgo Bay, etc. March 23, 1792, saw the first temporary settlement of white men in what is now the State of Washington, at Neah Bay, by the Spanish Lieutenant Salvador Fidalgo.

American efforts, mostly for trade, centered at that time on the voyages of Captains John Kendrick and Robert Gray. The latter's first arrival in 1788 resulted in his discovery of Grays Harbor. In the course of his second journey in 1792 he was the first to sail up the great river, which he named "Columbia" after his ship, thus giving this country claim to its vast territory, by priority of discovery.

A VIEW OF THE HABITATIONS IN NOOTKA SOUND

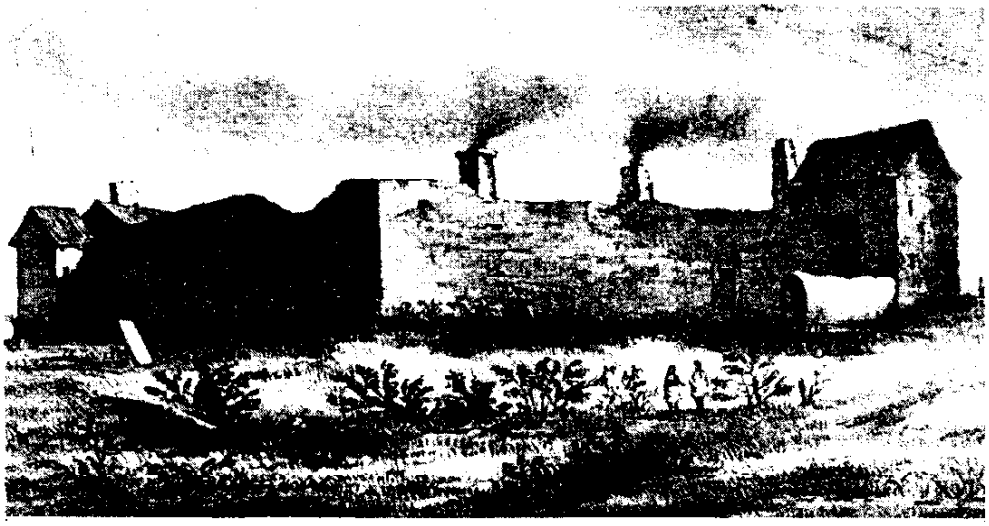
The British were active at the same time, and in 1792 Captain George Vancouver of the British Navy became the first white man to enter Puget Sound proper. His voyage accounts for many English names: Gulf of Georgia after George III; Mount Baker, Whidby Island, Port Orchard and Puget Sound after his lieutenants and officers; Mount Rainier after Admiral Rainier; Port Discovery after his ship; Mount Hood and Hood's Canal after Lord Hood; Vashon Island after Captain Vashon of the Royal Navy; Vancouver Island after himself; Port Townsend after Marquis Townshend; Mount St. Helens after the British Ambassador to Spain. Others were Admiralty Inlet, Dungeness, Deception Pass, Bellingham Bay, Birch Bay, Point Roberts, etc. After extensive explorations in Puget Sound, he finally landed on the mainland at what is now Everett, and took formal possession of all territory to the north, naming it New Georgia, after George III.

Interesting to note is the fact that Preston's Map of 1856 shows Puget Sound as being those waters about Steilacoom and Nisqually, whereas Admiralty Inlet extends from Vashon to Whidby Island. In time Puget Sound came to mean that portion from Tacoma to Whidby Island, and Admiralty Inlet the narrow stretch between Whidby Island on the one side, and Kitsap and Jefferson Counties on the other. All designations, including the Straits of Juan de Fuca, have in recent years been subordinated to the general description "Puget Sound."



VANCOUVER'S CHART OF PUGET SOUND, *1792*

CROSSING THE PLATTE RIVER



FORT HALL ON THE SNAKE RIVER ABOVE AMERICAN FALLS — OUTSIDE

Further American explorations were made by Captains Merriweather Lewis and William Clarke in 1805. Reaching the mouth of the Columbia during that year, they erected Fort Clatsop on Clatsop Beach, Young's Bay, there spending the winter of 1805-6. The result of this expedition was to open up the territory to the hunter and trader, which was followed by immigration to Oregon that began in 1840. By the Florida Treaty with Spain, signed February 22, 1819, the southern boundaries of the United States were definitely fixed from the source of the Arkansas River to the parallel of 42°, westward to the Pacific Ocean. This treaty definitely adjusted any claim that Spain may have had to the Pacific Northwest, but left Great Britain as a rival claimant. Captain Charles Wilkes, the last of the explorers and the first to cross into Eastern Washington over Naches Pass, arrived in the Pacific Northwest in 1841. He named many of his discoveries after subordinate officers, such as Bainbridge, Fox, McNeil, Maury, and Blake Islands, Elliott Bay (earlier known as Duwamish), Colvos and Hales Passages, Budd and Hammersley Inlets, Port Blakely, Port Madison, Port Gamble, Port Ludlow, and Mount Adams. He also named Commencement Bay and Point Defiance in Tacoma.

SETTLEMENT AND ORGANIZATION OF OREGON TERRITORY

In 1670 the Hudson's Bay Company was chartered to trade with the Indians around Hudson Bay, and held the field for over two centuries until the organization of a rival called the Northwest Company. Expanding across the Canadian wilds, both companies moved in the early 1800's to Northwestern Canada. Up to that time Oregon had no settlements, though in 1810 Captain Nathan Winship of Boston made an attempt at Oak Point on the Columbia, abandoning the project due to floods. In 1811, John Jacob Astor, an American citizen with British partners, founded a trading post on the same river at Astoria. It was already operating when the British Northwest Company moved down from Canada. The War of 1812, occurring just at that time, prompted Astor's British associates to sell him out to the Northwest Company, and caused the temporary transfer of Astoria to the British, who named it Fort George. About 1821 the two English companies merged, retaining the name Hudson's Bay Company. Three years later the headquarters were removed from Astoria to Fort Vancouver, further up on the Columbia. A second trading post, Fort Langley, was built on the Fraser River in 1827 and it was on a trip to this post that the famed Cowlitz Trail so well known to the early pioneers was first used. Other trading posts established were Fort Okanogan, Port Colville, and Spokane House in 1811-14; Walla Walla, 1818; Nisqually, 1833; Cowlitz, 1838; Victoria, 1843; etc.

There were as yet no permanent American settlements, and the first of these were made by missionaries Jason and Daniel Lee, who located on the Willamette about ten miles north of the present City of Salem in 1834; by Dr. and Mrs. Whitman, who stopped near Walla Walla in 1836, and by Reverends Ells and Walker, who came to the vicinity of Spokane in 1838. More missionary settlements were founded at Fort Nisqually in 1839; Cowlitz, 1838-9; Whidby Island, 1840, and Fort Vancouver, 1840.

Until the arrival of these missionaries the Hudson's Bay Company held undisputed sway over the Oregon country, and constituted whatever government existed. By 1842 American trappers began to gather in the Willamette Valley welcoming many newcomers from the East and by the next year a provisional government was established by the Americans, actually a republic within a republic, their definite status not having yet been determined. A code of laws was drafted, officers elected, and as it began to function, control of this vast region passed from the Hudson's Bay Company. The legislature met at Oregon City in 1843, effected an organization, elected George Abernethy as Governor and W. M. McCarver (who later founded Tacoma) as Speaker, and at once enacted a law fixing their boundaries: "Commenc-

MAP SHOWING TERRITORIAL ACQUISITIONS OF U. S. A.
Including
OREGON COUNTRY

ing at the paralled of 42°, as agreed between the United States and New Mexico, where it meets the Pacific Ocean, thence north along the coast to where the parallel of 54° 40′ strikes the same, thence east along said parallel as agreed between the United States and Russia to the summit of the Rocky Mountains, thence south following the summit to the parallel of 42°, and then to place of beginninig." By June 15th, a treaty was concluded with Great Britain, definitely settling the northern boundary at the parallel of 49°. The republic continued under a provisional government until March 3, 1849, when congressional action established the Oregon Territory with Joseph Lane as the first territorial governor. By that time the territory was divided into five districts, with a population totalling 304 settlers north of the Columbia. In 1852 the capital was removed from Oregon City to Salem.

SETTLEMENT AND ORGANIZATION OF WASHINGTON TERRITORY

The first American pioneers, other than traders and missionaries, to settle in what is now the State of Washington, arrived in 1844, from the Willamette Valley, among them being Michael T. Simmons, who located at the mouth of the Deschutes River, where he started a settlement called Newmarket, since named Tumwater. In 1846, came among others, Levi L. Smith and Edmund Sylvester, who founded a community called Smithfield, which in 1850 was platted as the town of Olympia. Here the first frame house on Puget Sound was built by Isaac N. Ebey, (who later moved to Whidby Island). It was used as post office, custom house, store, etc. As a consequence of Indian troubles, the United States Government, about 1850, established Fort Steilacoom, and the first court in Lewis County was held there to try some Indian murderers.

The leader in opening up the Washington area was Michael T. Simmons, one of the first Thurston County commissioners, first townsite proprietor, first millowner, first ship owner, first postmaster, first merchant, and member of the first Washington Territorial Convention. Trade proceeded briskly but without regulation, until on

February 14, 1851, Congress established the Puget Sound Customs District, the port of entry being Olympia. Simpson P. Moses was the first Collector of Customs, and the Schooner *Exact* the first vessel to clear the port.

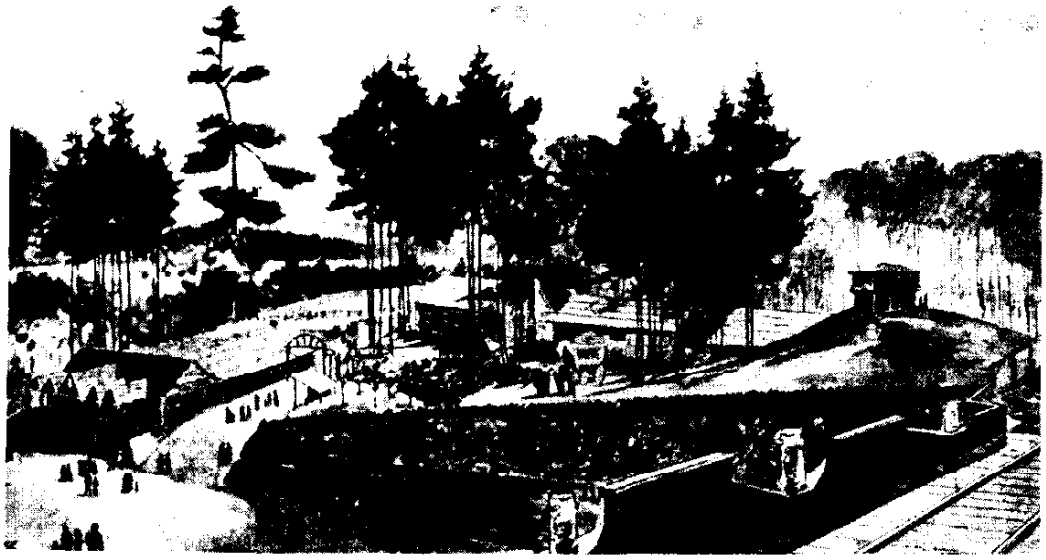
With trade came further settlement of the region, and each month adventurous pioneers went a few miles to the north of their nearest neighbors. As these new areas grew in population, new counties were formed to give them the benefit of law and order, but distances were too great to allow for rapid and safe communication between county seats and the capital of Oregon Territory. Soon the residents north of the Columbia River felt that the creation of a new territory would give them the protection of the law nearer at hand than under the direction of Oregon territorial officials. Agitation begun in 1852 resulted in a convention at Monticello to memorialize Congress for the establishment of a new territory to be called "Columbia" with the Columbia River as the southern and eastern boundaries. Delegates from Seattle were Luther M. Collins, Charles C. Terry, George N. McConaha, William N. Bell, John N. Low, Arthur A. Denny, and Dr. David S. Maynard. Presented to Congress, the memorial was adopted on March 2, 1853, with a change in name from Columbia to Washington. The Organic Act defined these boundaries: "All of Oregon Territory south of the parallel of 49° and north of the Columbia River from its mouth to where the parallel of 46° crosses said river near Fort Walla Walla, thence along said parallel to the summit of the Rocky Mountains." This vast area was reduced by about 70 per cent when on March 3, 1863 Congress created Idaho Territory. The first census in 1853, showed a total population of 3.965 divided as follows: Clarke, 1,134; Island, 195; Jefferson, 189; King, 170; Lewis, 616; Pacific 152; Pierce, 513; Thurston, 996.

First appointments made by President Franklin Pierce were: Isaac Ingalls Stevens of Massachusetts, Governor and Superintendent of Indian Affairs; Charles H. Mason of Rhode Island, Secretary; J. C. Clendenin of Louisiana, Attorney; J. Patton Anderson of Mississippi, Marshal; Edward Lander of Indiana, Chief Justice; Isaac Ebey of Whidby Island, Collector of Customs. First election to the Territorial Legislative Assembly from King County, held at Seattle and Alki, on January 30, 1854, resulted in the selection of a delegate to the Territorial House of Representatives, and two to the Council. Soon after, February 27, 1854, the first territorial legislature met, and their proceedings were the first laws to be printed in book form.

The seat of government of Washington Territory was, by legislation passed January 9, 1855, established and located on the land claim of Edmund Sylvester, in the town of Olympia, which was incorporated in 1859. Next year the legislature transferred the location to Vancouver, but eventually Olympia was definitely designated. In 1869 the legislature voted to submit to the electorate the question of framing a constitution and applying for admission as a state. This was the beginning of agitation which resulted in Congress admitting Washington into the Union in 1889 as the forty-second state. A constitutional convention was held, King County's delegates being John P. Hoyt, Thomas T. Minor, John R. Kinnear, David E. Durie, M. J. McElroy, Morgan Morgans, George W. Tibbetts, Richard Jeffs and W. L. Newton. Adopted by the convention, the state constitution was ratified by the people at the October election of 1889.

The first newspaper established in the Territory of Washington was the Columbian at Olympia, on September 10, 1852 by James W. Wiley and Thomas F. McElroy. Known successively as the Washington Pioneer and the Pioneer Democrat, in 1861 its material passed to the Overland Press which was succeeded by the Pacific Tribune, which in turn, after its removal to Seattle, was merged with the Intelligencer (founded in 1865 as a weekly). The Post-Intelligencer resulted from a consolidation of the Post and the Intelligencer in October, 1881.

FORT NISQUALLY—ESTABLISHED 1833 BY HUDSON'S BAY CO.



INDIAN WAR TIME BLOCKHOUSE

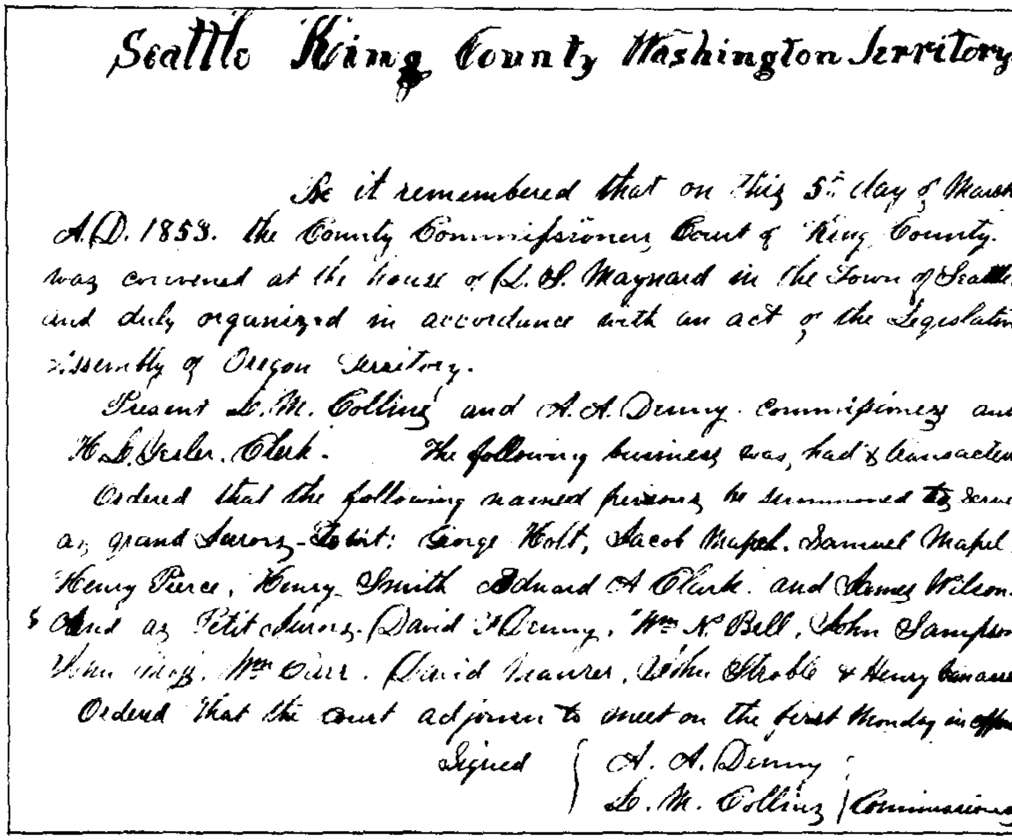
SETTLEMENT AND ORGANIZATION OF KING COUNTY

The first evidence then, of American control in the Williamette Valley was the provisional government of the Territory of Oregon organized in 1843. By 1849, this was replaced by the permanent organization of Oregon. One of the six districts into which it was divided was named Vancouver, (changed to Clarke County in July, 1849) embracing the vast region north and west of the Columbia River, with the summit of the Rocky Mountains as the eastern boundary. It was from this district that all the counties in Washington were created, the first of them being Lewis County, which on December 21, 1845 was set off from Vancouver. It consisted of the area west of the Cowlitz River and the summit of the Rocky Mountains, and north of the Columbia River to the parallel of 54° 40′, the southern boundary of the Russian possessions.

On January 12, 1852 Lewis County was divided by creating Thurston County, which covered all the Puget Sound country and was named after Samuel R. Thurston, Oregon's first territorial delegate to Congress. In June of the same year the first county officers for Thurston were elected, and as there were then no precincts north of Steilacoom Seattle people had no vote. The first Thurston County Commissioners were A. A. Denny of Seattle, S. S. Ford, Sr. of Skookum Chuck, and David Shelton of Hammersley Inlet, and at their first session, the county was divided into two precincts, one of which constituted what is now King and Snohomish Counties. Before the establishment of King County, or the Territory of Washington, and by act of the Oregon Legislature, Dr. D. S. Maynard became the first Justice of the Peace and the first Notary Public at Seattle.

On December 22, 1852, Thurston County was divided into King, Pierce, Island and Jefferson Counties. The first two were named after the successful candidates for President and Vice-President—Franklin Pierce of New Hampshire and William Rufus King of Alabama. Thus, King County was the fourth in succession organized north of the Columbia River, all while yet subject to the Oregon Territory. Its original boundaries were: "Commencing at the northeast corner of Pierce County, thence along the Cascade Mountains to a parallel passing through Pilot Cove, thence from the point last aforesaid west along the said parallel of latitude to the Pacific Ocean, thence south along the Coast to a point due west of the head of Case's Inlet, thence east along the northern boundary line of Pierce County to the place of beginning." Pilot Cove was named by Captain Wilkes in 1841, and from his description, it appears to be near what is known as Point No-Point. Thus it will be seen that King County extended from the Cascade Mountains to the Pacific Ocean. After creating other counties out of it, such as Slaughter in 1857 (subsequently named Kitsap), legislation on January 31, 1867 designated the King County boundary as follows: "Commencing where the fifth standard parallel line strikes the mainland near the head of Commencement Bay, thence east along said parallel line to the middle of the main channel of the White River, thence up the middle of the main channel of the White River to the forks of White River and Greenwater, thence up the main channel of Greenwater to the summit of the Cascade Mountains, thence northerly along said summit to the southeast corner of Township 27 north, Range 11 east, it being a point due east of the northeast corner of Township 26 north, Range 4 east, thence west to Admiralty Inlet, thence southerly along the main channel of Admiralty Inlet, Colvos Passage and Commencement Bay, to the fifth standard parallel and place of beginning."

The first officials appointed for King County by the Oregon legislature in 1853 were John N. Low, Luther M. Collins, and Arthur A. Denny, as County Commissioners, and the minutes of their first official meeting are herein illustrated as being of interest. Other officials appointed were H. L. Yesler, Probate Clerk and C. D. Boren, Sheriff. In the same year, the county seat was designated at


Seattle King County Washington Territory

Be it remembered that on this 5th day of March A.D. 1853. the County Commissioners Court of King County was convened at the house of D. S. Maynard in the Town of Seattle. and duly organized in accordance with an act of the Legislative Assembly of Oregon Territory.

Present L. M. Collins and A. A. Denny Commissioners and H. L. Yesler. Clerk. The following business was had & transacted

Ordered that the following named persons be summoned to serve as grand Jurors - to wit: George Holt, Jacob Maple. Samuel Maple. Henry Pierce, Henry Smith Edward A Clark. and James Wilson. & And as Petit Jurors. David T. Denny, Wm N. Bell, John Sampson. John Ross. Wm Orr. David Maurer, John Strobel & Henry Van Asselt

Ordered that the court adjourn to meet on the first Monday in April.

Signed { A. A. Denny
L. M. Collins } Commissioners

MINUTES OF FIRST COUNTY COMMISSIONERS MEETING
March 5th, 1853

Seattle on the land claim of Dr. D. S. Maynard, where the election precinct was also established. In the first election held in Seattle, for delegate to the Oregon territorial legislature, A. A. Denny was chosen.

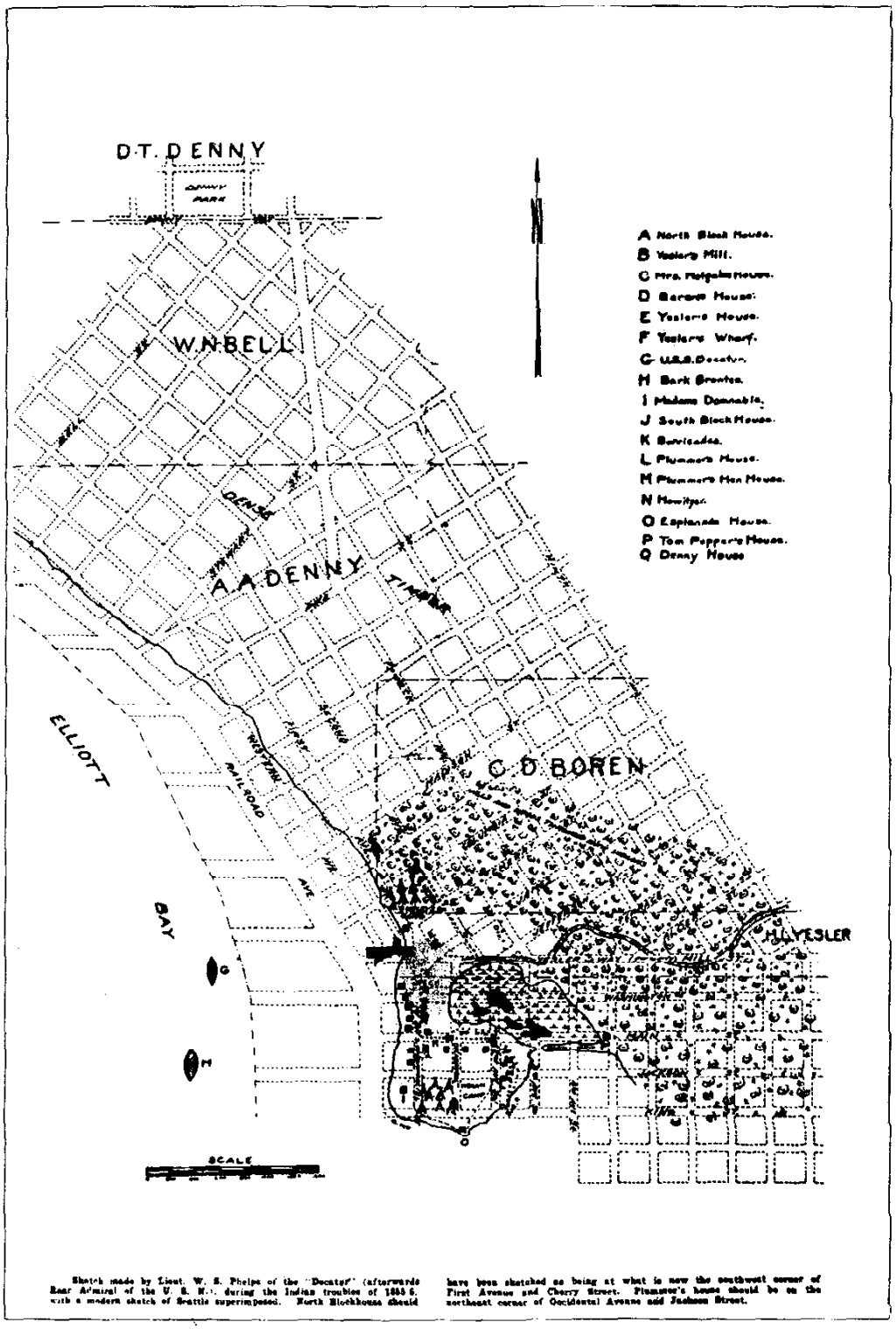
Upon organization of the Washington Territory, an act was passed replacing these officials and appointing the following until the next annual election: Thomas Mercer, G. W. W. Loomis and L. M. Collins, Commissioners; C. D. Boren, Sheriff; H. L. Yesler, Auditor; William P. Smith, Treasurer; Henry A. Smith, Superintendent of Schools; John C. Holgate, Assessor; William A. Strickler, Probate Judge; John A. Chase, S. L. Grow and S. W. Russell, Justices of the Peace; B. L. Johns, S. B. Simons and James N. Roberts, Constables. Pursuant to legislation providing for the election of county officials to replace those appointed, the first held under the laws of Washington Territory on September 4th, 1854 resulted in: Thomas Mercer, C. C. Lewis, and Alfred Savage, Commissioners; Thomas S. Russell, Sheriff; John Henning, Assessor; Henry Adams, Auditor; Henry A. Smith, School Superintendent; W. N. Bell, Coroner; Sumner B. Hines, Wreckmaster; and A. A. Denny to the Washington Territorial House of Representatives. A peculiar office created by the legislature in 1854 was that of Wreckmaster, (abolished in 1915) charged with salvaging possible wrecks off the Coast, and Hilary Butler was the first one appointed for King County. Some subsequent first appointments were William A. Strickler, County Surveyor, in 1854 and Isaac M. Hall, County Attorney, in 1856. In fact, in the early days there were so many offices to be filled for the number of people available that many times one person held as many as six in the course of a year.

By 1851, there existed these settlements: Astoria 1811, Walla Walla 1818, Vancouver (on the Columbia) 1824, Nisqually 1833, Cowlitz 1838, Victoria 1843, Tumwater 1845, Olympia 1850, and Steilacoom, Port Townsend, and Oak Harbor on Whidby Island all in 1851. Although Isaac N. Ebey, Dr. D. S. Maynard, and others explored the site which is now Seattle, and John Holgate in 1849 staked out a land claim near the mouth of the Duwamish River intending to return later from the Willamette Valley, the first permanent settlement in King County was not made until September 15, 1851 by Luther M. Collins, Jacob and Samuel Maple, and Henry Van Asselt and family, who located at the mouth of the Duwamish River. E. B. Maple joined them in 1852.

Another settlement in King County was founded on September 28, 1851 at Alki, by David T. Denny, John N. Low and Leander Terry who came from Olympia in a sailboat with Captain Robert C. Fay. Soon Low went back to Portland, returning to Alki on November 13th with his family, Carson D. Boren, William Bell, and their families, Charles C. Terry and Arthur A. Denny. Convinced that their community was destined to become a flourishing metropolis Terry named the spot New York after his home town. Soon after the Chinook word "Alki" (meaning "by and by") was facetiously added, the town becoming known as New York-Alki, and in time just Alki. In the plat of 1853 it is called Alki-on-New York Point, though the United States Government still adheres to the name Battery Point. Here was built the first house in King County for J. N. Low, and here too the Terrys and Low established the first mercantile enterprise in King County known as the "New York Trading House." Lee Terry returned soon to New York and after Low sold out in 1853 to move to Olympia, the firm became known as the "New York Cash Store" with C. C. Terry as sole owner. Two years later he too moved to Seattle, having bought 150 acres from Boren and traded 320 acres of his Alki claim for 260 acres of Maynard's, all of which was eventually platted as the Terry Addition to the Town of Seattle. This was a disastrous transaction for Maynard, who sold the entire Alki property for $460.00 in 1868.

On February 13th, 1852 Bell, Boren, and the Dennys of the Alki pioneers, not having any ownership rights in that settlement, decided to locate four or five miles north where the harbor was better, timber as good for the development of the lumber trade with San Francisco, and agricultural opportunities greater. Here they staked out three claims in one body of land, located at the present heart of Seattle, Boren's being the most southerly, (his south line about where Pioneer Place now stands), followed by A. A. Denny, with W. N. Bell in what developed into Belltown. Later, adjoining Bell on the north was D. T. Denny, whose claim fronted on the Sound and Lake Union. In April came Dr. D. S. Maynard from Olympia, and in October, Henry L. Yesler, for whom the original pioneers made room by relinquishing part of their claims. Thomas Mercer who came in April 1853 took up a claim north of D. T. Denny, Mercer Street being the dividing line between them. His claim also fronted on Lake Union, which, as well as Lake Washington received their names at his suggestion, though the latter lake in Preston's map of 1856 is still called Duwamish. By 1885, his and D. T. Denny's Tracts were included within Seattle's limits. In the original company that came with Thomas Mercer, was Aaron Mercer who first settled on the east side of Lake Washington, where his name is perpetuated in Mercer Island and Mercer Slough.

The land on which these pioneers settled on Elliott Bay was at first known as Dewamps but in 1852 named Seattle after their best Indian friend Chief Seattle (Sealth). West of First Avenue and First Avenue South was the beach. The bay curved east at King Street then north a short distance, again east to about Ninth Avenue South (foot of Beacon Hill) and then south in a wide sweep for miles. At high tide an island of about twenty acres was formed by the overflow at Washington Street, on which for about twenty-five years practically all of Seattle's business was centered. The map on the next page explains the position of this island and the lagoon to the east of it. Most of the area constituted Maynard's claim which fronted on First Avenue South from Yesler's sawmill at Yesler Way, four blocks south to the bay at King Street. The beach along the waterfront from



Sketch made by Lieut. W. S. Phelps of the "Decatur" (afterwards Rear Admiral of the U. S. N.) during the Indian troubles of 1855-6, with a modern sketch of Seattle superimposed. North Blockhouse should have been sketched as being at what is now the southwest corner of First Avenue and Cherry Street. Plummer's house should be on the northeast corner of Occidental Avenue and Jackson Street.

MAP OF EARLY SEATTLE, 1855-6

(Reprinted from Denny's Pioneer Days on Puget Sound"

Columbia to Madison Streets was lined with Indian shacks until they were driven off by the advance of business. Of the original site, very few blocks east from the Sound were level, but by cutting down the highlands, filling in the lowlands, driving back the sea, and grading the streets, the main business portion of the town took on the appearance evident today.

Continued settlement of Seattle and incidentally King County was made possible largely by Henry L. Yesler, who in 1852 erected the first steam sawmill in the county, at about First Avenue and Yesler Way, thus giving the struggling pioneers the assurance of some employment, and constituting an invitation for others to come. Originally planned for Alki, the early settlers fearing the rise of a rival town, rearranged the lines of their claims to offer Yesler a site for his mill, which was accepted. After Yesler, came Maynard; then Dr. Henry A. Smith of Smith's Cove, Edmund Carr, John Ross, Erasmus M. Smithers, William A. Strickler and seven others, who located around the body of water, discovered by the Dennys on an exploration trip and named Salmon Bay by the settlers. By 1853, the region near Kent, Thomas and Auburn could boast of about twelve families, five around Foster, six on the Black River, two along the Duwamish at Riverton, and eleven on the Duwamish at what is now South Seattle. On the west side of Lake Washington near the present Seward Park were four families. On the bay south of town were four. In Rainier Valley was located one large family. By 1860 settlements increased not only near Seattle, but in such remote areas as the Snoqualmie Prairie. In Seattle itself, that year, there were only about twenty families, all located between Seneca and King Streets, west of Third Avenue. Ten years later King County had gained but little in population, there being nothing between Cedar River and Issaquah, nor between Issaquah and Snoqualmie. In fact, in all King County there were only six post offices; Seattle, Black River, White River, Slaughter, Squak (Issaquah) and Snoqualmie. Slaughter (subsequently Auburn), settled in 1868, was up to that time included in the region known as White River.

Of the settlements near Seattle that have since been included in the City, Alki was the most important. In 1853 both Alki and Seattle were platted as townsites. They were about the same size, and retained their separate activities and were jealous rivals for more than five years. Subsequently the plat of the Town of Alki was vacated, and after Charles C. Terry moved to Seattle, it soon faded away as a town, to be revived some fifty years later, becoming part of West Seattle, and in 1907 annexed to Seattle. Another portion of West Seattle included in this annexation was the high promontory directly across the bay, called at first Lamb's Point (Duwamish Head), in the 1860's Freeport, in 1877 Milton and finally West Seattle. Duwamish (later Georgetown), South Seattle, and Rainier Valley already settled by 1853 were also added to Seattle in 1910, 1905, and 1883 respectively. By 1879 a town of nearly 50 houses and about 500 people had grown up on the shores of Lake Union. Ballard, annexed to Seattle in 1907, was the name given to the Gilman Addition, consisting of 800 acres platted in 1887 by William Ballard, John Leary and associates, operating as the West Coast Improvement Company. Shortly before 1889 H. L. Yesler sold his sawmill in Seattle to develop large real estate holdings, later erecting another mill on Union Bay, Lake Washington, around which grew up the town of Yesler, since absorbed by the Laurelhurst District, which was taken over by Seattle in 1910.

By 1880, with the advent of the railroads, the phenomenal growth of the Pacific Northwest began in which Seattle and King County shared. Many new regions were settled, and many new towns established throughout the county. Though particulars concerning all of them are not readily available, the development of those playing a part in the early history of the county is roughly outlined.

WHITE RIVER VALLEY. Next to Seattle, this valley received the greatest influx of early pioneers. Beginning with the first arrivals along the Duwamish on September 15th, 1851. (Henry Van Asselt, L. M. Collins, Jacob Maple and Samuel Maple), the year 1853, when Naches Pass was opened to immigrants, brought a considerable increase in population. In that year, A. L. Porter settled on the prairie known by his name, and Dominick Corcoran and James Riley located on

Muckleshoot Prairie, these three being the most remote settlements in the valley. Lower down, were John M. Thomas, Moses Kirkland, William H. Brannan, and nine others. Near the junction of the Black and White Rivers, were William H. Gilliam, the Fosters, Bryant, and Brownell. Further up the Black River, came Dr. R. M. Bigelow, who discovered coal in that region, and three others. On the Duwamish were John Buckley, George Holt, Eli B. Maple, C. C. Lewis and five others. Until the construction of the railroad in the 1880's travel was by water, Indian trails, or crude roads constructed by the settlers, even the Military Road which followed the bluffs on the west of the valley being in that class. The coming of the railroad and the working of the coal mines made communication between settlements much easier. Until 1886, what is today Kent, Auburn, Thomas, Christopher, O'Brien and Orillia, were all known as White River from the Post Office of that name established in 1861 at the Neely residence in what is now O'Brien, D. A. Neely being the first Postmaster.

O'BRIEN
ORILLIA
THOMAS
CHRISTOPHER

The town of O'Brien was settled in 1868 by the brothers Morgan and Terence O'Brien from Victoria, B. C., around which center an Irish colony grew. Henry Adams was the first to locate at Orilla in 1853. Both are farming communities. The site of Thomas, midway between Kent and Auburn, was first farmed by John Thomas (a brother-in-law of Charles C. Terry) in 1853. Christopher, another farming community between Thomas and Auburn was named for Thomas Christopher one of the first Norwegians to settle in King County, 1863.

AUBURN. Originally platted in 1886 as the Town of Slaughter by Dr. Levi W. Ballard, the site was part of a tract he had homesteaded in 1875. However, as early as 1868 the name of this town appeared in the records, commemorating Lieutenant Slaughter who was killed in 1856 during the Indian Wars. When platted it was a village no larger than Christopher, but by having the county build a short cut from the Green River Road, traffic was diverted to it, resulting in its rapid growth. Due to a growing dislike of the name "Slaughter," it was changed in 1893 to Auburn, being incorporated June 1, 1891.

EARLY VIEW OF MAIN STREET, AUBURN

KENT. Though settled in 1853 by James J. Crow, (another brother-in-law of Charles C. Terry), D. A. Neely and S. W. Russell (Crow's brother-in-law), what is now Kent was still a small village. It was named after the railroad station, which in turn received that designation from Kent, England, where hops were raised as they were in the Kent area. It is peculiar that none of the old pioneers had thought of platting the town, and it was not until 1884 that H. L. Yesler did so, naming it Yesler, the region being now known as Yesler's First Addition to Kent. Four years later John Alexander filed the first plat using the name Kent, though it is said that before this the village had also been called Titusville. Many additions to the plat followed, and on May 26, 1890, Kent was incorporated as a town, in 1909 annexing certain surrounding territory.

RENTON. First settler at Renton was Henry H. Tobin, in 1853. Dying soon afterwards, his widow married Erasmus M. Smithers, who platted the town in 1876, naming it after Capt. William Renton, one of the founders of the Renton Coal Company. Incorporated on September 3, 1901, additional territory was annexed in 1909 and again in 1924, but next year, the city limits were again reduced.

FIRST SCHOOLHOUSE AT RENTON, ABOUT 1859

ISSAQUAH. The little valley at the head of Lake Sammamish was known as Squak, a corruption of the Indian name spelled Isquowh, which is today known as Issaquah. The first setlter was L. B. Andrews who went there in 1863 to develop a coal mine, and attracted during the next year about 24 others. Communication with Seattle was over a rough foot-path which began at Coal Creek on the east shore of Lake Washington. On the building of the Seattle, Lake Shore and Eastern Railway which tapped the Gilman mines in the Squak coal fields, the region was platted as the Town of Englewood in 1888 by Ingebright Wold who had settled there in 1867. The mines had been named in honor of Daniel H. Gilman who promoted the railroad, and by general consent the town soon took that designation and was listed as Gilman, when incorporated on April 25, 1892. The post office which had been known as Squak was given the name Olney to avoid mistaking it for another town in Washington called Gilman. Confusion from so many names resulted, until in 1890 both town and post office were listed as Issaquah.

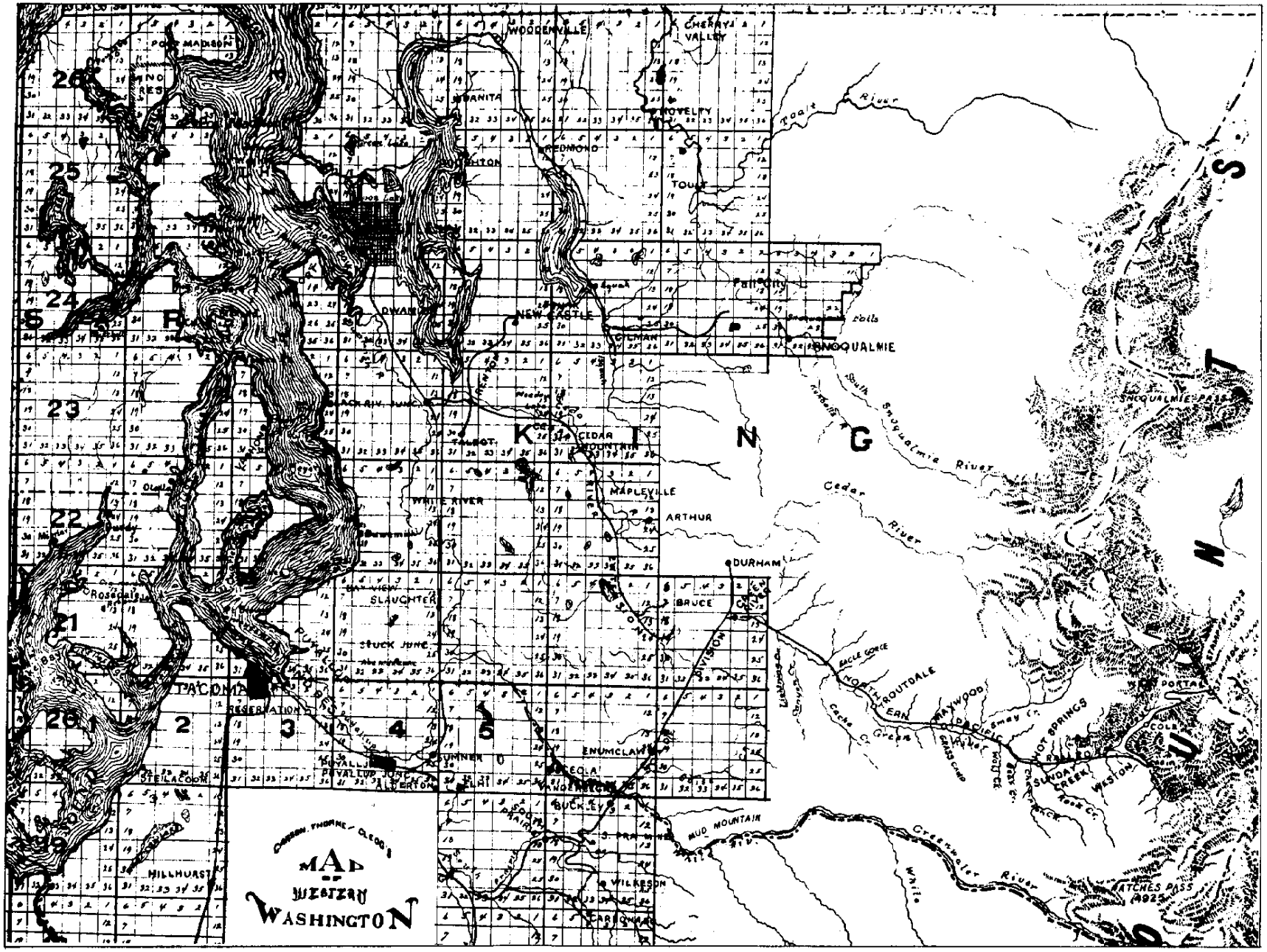
MONOHON The first of these was founded by Martin Monohon in 1877.
PRESTON Preston received its name from William Preston, an associate
HIGH POINT of D. H. Gilman in building the Seattle Lake Shore and Eastern Railway. High Point, settled by John Lovegren in 1905, was so named because it was the top of a steep grade of the Northern Pacific's Snoqualmie branch.

SNOQUALMIE VALLEY. Next to the White River Valley, in historical importance to King County is the fertile Snoqualmie, named after the Indians inhabiting the region before the white man came. Three forks of the Snoqualmie River originate in the Cascades, which merge into a common stream at the base of Mount Si, named after an early settler near North Bend, called Josiah Merritt (Uncle Si). Settlement began in 1858 by Jeremiah W. Borst and the Kellogg Brothers, at which time from Salmon Bay to the prairie there was not a single white inhabitant. By the 1860's the prairie was fairly well taken up and the pioneers began to stake claims below the Falls. Outstanding among them all was Borst, whose farm at what is now Meadowbrook, was the last contact with civilization west of the Pass. He was the first postmaster in this region, the first farmer and the first storekeeper. He was the first to engage in meat curing and packing, selling his product in Seattle, and bringing back provisions which he sold to the other settlers. Besides lumbering and farming, mining promised to be an important industry due to the discovery of iron ore deposits in 1869 by A. A. Denny and party. By 1870, in the entire Snoqualmie and Squak Valleys there were only thirty-one adult whites, and up to 1888 there was no settlement in villages, the region being covered with widespread farms. The platting of towns only began with the coming of the railroad to Sallal Prairie.

FALL CITY Of the three villages into which the scattered
NORTH BEND farms crystallized, Fall City (originally settled in
SNOQUALMIE 1870) was the first to be laid out as a town in 1887
SNOQUALMIE FALLS by Jerry Borst. Originally platted as Snoqualmie by William H. Taylor in 1889, and for awhile called Mountain View, as the neighboring town of Snoqualmie Falls began to become known as Snoqualmie, North Bend was incorporated as a city on March 1, 1909, being so named because of its situation near the bend toward the north of the Snoqualmie River's South Fork. Snoqualmie Falls was also platted in 1889 by the Snoqualmie Land and Improvement Company on the left bank of the river just above the falls, and gradually taking the name Snoqualmie, it was so incorporated on May 29, 1903. What is now Snoqualmie Falls is the mill town which grew up later on the hill beyond the right bank of the river.

CARNATION Though the Snoqualmie River traverses the valley in King
DUVALL County, its lower reaches before joining the Snohomish are
NOVELTY located in the Snohomish Valley. There were no roads at first from Seattle to the region which is now Duvall, Carnation, and Novelty. The early residents therefore had to utilize the river as their highway and their interests were naturally more closely linked with Snohomish rather than King County. Eventually, however, the Seattle Lake Shore and Eastern Railroad and the building of highways brought this area into close touch with Seattle, and it began to develop. Tolt was settled as early as 1865, (the name being derived from the Indians called Tolthue), was platted in 1902 by W. H. Lord, incorporated on December 30, 1912, and its name was changed to Carnation by the State Legislature in 1917 in recognition of the large establishment the Carnation Milk Company built there. Duvall, named after James Duvall who located there in 1875, was platted in October, 1910, by John D. Bird, and incorporated on January 6, 1913. Novelty was first settled in 1870. In 1886, the post office for the entire region was Cherry Valley situated on Snoqualmie River.

ENUMCLAW AREA. The first settlement in the region where Enumclaw is located took place in 1853 when A. L. Porter located on Porter's Prairie. By 1870, James McClintock had taken up a claim on Newauken Creek with George Vanderveck



KING COUNTY ABOUT 1880
(Reprinted from Map of Western Washington, Loaned by Kroll Map Co.)

BOTHELL. The Bothell family came from Seattle in 1886 to engage in logging operations, and the town was named after them, was platted by David C. Bothell in 1888, and incorporated on April 12, 1909.

WOODINVILLE. After the sale of M. D. Woodin's tannery in Seattle, his son Ira took up a claim on the Sammamish River in 1872, founding this town which was named after his family.

JUANITA. Settled in 1870, it was first known as Hubbard, but was not platted as a townsite until 1921.

HOUGHTON. On Lake Washington, south of Kirkland, it was first settled in in 1875, and named after the Houghton family of which Willard Houghton was an early logger.

BELLEVUE. Settled in the 1880's, as early as 1887 it boasted a post office. The town was platted in 1904 by Oliver F. Franz.

MEDINA. Bellevue's neighboring residential suburb on the north, it was first platted as Medina Heights in 1914 by E. A. Barnes.

MAPLE VALLEY. This town was created by the Columbia and Puget Sound Railroad when that line was built from Franklin to Black Diamond. George W. Ames is said to have been the first settler, forcing his way through the wilderness from Seattle in 1879. Soon others selected homesteads in the vicinity. Although the town was laid out in 1887, the first recorded plat was filed by F. A. Hill in 1890, the name Maple Valley being suggested by the original resident, G. W. Ames.

RAVENSDALE. Settlement was begun in 1900 when the Leary Coal Company opened their mines here. The townsite was laid out by the Northern Pacific Railway and incorporated on August 4, 1913. It was at one time destroyed by fire, but was nevertheless, never disincorporated.

TUKWILA. South of Seattle and formerly known as Garden Station, it received its present name in 1905 when the post office was established there. In the Indian tongue, it means land of hazelnuts. It was not originally platted as a town, but was formed by the merging of several plats, the first in 1902, and the balance in 1903. The town was incorporated June 16, 1908.

PACIFIC CITY. Founded by C. D. Hillman, an active real estate operator, it was platted as an "Addition to Seattle" in 1906, and incorporated on August 2, 1909.

DES MOINES. The first settler in the 1870's was John Moore, but the townsite was not laid out until 1889 by the Des Moines Improvement Company, a member of which firm J. W. Kleev named it after his former home in Iowa. Considered a town since 1890, it has never been incorporated as such.

A study of King County maps since 1880 reveals a great increase in the number of communities. When the railroads penetrated new areas, stations were set at convenient locations, around which in time, many settlements grew up. Coal mining was responsible for the founding of other communities, and beach resorts frequently developed a population of all-year residents. Real estate additions and sub-divisions also caused the growth of many areas, some of them absorbed by Seattle. At present, including railroad stations, junctions and crossings, beach localities, farming settlements, towns and cities (excluding Seattle) there are a total of 181 such places in King County, most of them in the western area. It is certain that the future will see new communities developed, since the early migrations from the east are today being duplicated by an increasingly great number of arrivals from the dust bowls of the middle west.

SEATTLE—INCORPORATION AND ANNEXATIONS

In January 1865 the legislature chartered the Town of Seattle providing for the annual election of a board of trustees of five, who were to appoint the clerk, marshal and committing magistrate. The trustees were to make laws; levy taxes; promote public health, safety and morals; control improvements, repairs, and grading of roads, streets and alleys. The town was excluded from any county road district, and road taxes were to be collected by the marshal and expended by him, as directed. Trustees were to elect one of their number as president, another as treasurer. They were to receive no pay, the clerk such pay as enacted, and the marshal such fees as provided for constables. Until the first elections, the legislative act appointed as first trustees, C. C. Terry, President, H. L. Yesler, D. T. Denny, Charles Plummer and Hiram Burnett. They appointed Thomas S. Russell as marshal, Charles Egan as Clerk and S. F. Coombs as Committing Magistrate. The first ten ordinances passed by the board of trustees for the town of Seattle are interesting: Municipal tax of five mills; prohibiting pigs from running at large; imposing fines for drunkenness and disorderly conduct; regulating construction of board sidewalks on Commercial Street (First Avenue South) from Mill Street (Yesler Way) to Jackson Street; forbidding Indians to reside on certain streets; imposing fines for reckless and fast driving; licensing shows, concerts, circus, etc., at $5.00 per performance; establishing fees for committing magistrates; imposing fines for carrying and using deadly weapons; abatement of nuisances.

Ordinances to prepare a uniform grade for the town's streets and levying taxes for that and other purposes gave dissatisfaction, and the citizens prevailed upon the legislature to repeal the act of incorporation in 1867, and to direct the county commissioners to take charge of town property.

However, on December 2, 1869, Seattle was again incorporated by the legislature, this time as a city. The second act designated its boundaries; vested power in a mayor and common council; provided for their annual election as well as a recorder, treasurer, marshal, assessor, and collector, and for the filling of vacancies; outlining the powers and duties of all city officials, among which was levying and collection of taxes, jurisdiction of streets, granting of franchises, etc. The mayor and councilmen were to receive no salary, and the others such as provided by enactment. Until the first election, the following were appointed by the act: H. A. Atkins, Mayor; Ike M. Hall, Recorder; John T. Jordan, Marshal; S. G. Calhoun, C. P. Stone, John Collins, L. V. Wyckoff, Amos Brown, Frank Mathias, and A. S. Pinkham, as Councilmen.

The growth of the city both in area and population brought its boundaries at various times to the edge of settlements already in existence in King County. In its forward march Seattle absorbed such suburban communities, many of which were already incorporated as towns. An indication of its increase is the fact that by 1883 some sixty additions were platted, each one filling up with residents and crowding both the northern and southern limits. Thus, it will be interesting to trace the evolution of Greater Seattle.

On incorporation in 1869 the northern boundary ran generally along section lines from about Smith's Cove, crossing the southern end of Lake Union, east to Lake Washington. The southern limits began at about where the Duwamish River branches out into the present East and West Waterways, generally across section lines east to Lake Washington. The original area therefore included Smith's Cove, the southern portion of Queen Anne Hill, Capitol Hill, the central business section of Seattle, Madrona, Beacon Hill and Rainier Valley. From about Yesler Way on the north, to the mouth of the Duwamish River on the south, and east to Beacon Hill were tidelands which were reclaimed in later years.

An amendment to the act of 1871 brought the northern boundary further south, on section lines from Elliott Bay along Bell Street in William N. Bell's plat, through A. A. Denny's claim east to Lake Washington. This excluded on the north Capitol Hill and the southern portion of Queen Anne Hill.

Again amended in 1875, the northern boundary remained as fixed in 1871, but the southern liimts were carried further north to about Yesler Way, east generally along section lines to Lake Washington. With this amendment the southern area was reduced by Beacon Hill and Rainier Valley.

Once more amended in 1883, the boundaries at the time of incorporation in 1869 were practicallly reinstated. The area therefore re-included on the north Capitol Hill and the southern portion of Queen Anne Hill, adding the central portion thereof, and on the south Rainier Valley and Beacon Hill, adding the northern portion of South Seattle from the Duwamish to Jefferson Park.

An amendment in 1886, with boundaries generally the same, added to the area only a small portion of the Broadway district.

Seattle's further increase in territory was by annexation and not by charter amendment, as noted below. The names in parenthesis signify original settlements or other communities included in the larger districts taken into the city.

In 1891—Green Lake, Phinney, Wallingford (Latona), Fremont (Edgewater), University (Brooklyn), remainder of Queen Anne Hill (Ross, Boulevard—now Interbay, Ballard Junction), Magnolia (Fort Lawton, Pleasant Valley), remainder of Broadway, Montlake (Union City).

In 1895—Elliott Bay and Puget Sound Shorelands (Seattle Tide Lands). In this is included that great area mentioned above from Yesler Way on the north to the mouth of the Duwamish on the south, east to Beacon Hill. The improvement began officially with the appointment of a Harbor Line Commission in 1890. Three years later the legislature passed an act in relation to tide flats authorizing excavation of waterways through state tidelands and the use of material so excavated to fill tide and shore lands above high tide adjacent thereto or in front of incorporated cities. This resulted in the reclamation of large areas of tidelands, providing industrial sites, which were annexed to the city in 1895 as the Seattle Tide Lands.

In 1905—South Seattle (Argo).

In 1907—Lake Union Shorelands, Ballard, Ravenna, Mount Baker, Columbia City (Van Asselt, York), Southeast Seattle, Bailey Peninsula (Seward Park), Rainier Beach (Dunlap, Atlantic City, Brighton, Brighton Beach, Cardmoore), remainder of Rainier Valley, South Park, West Seattle (Alki, Milton, Spring Hill, Fauntleroy, Youngstown).

In 1908—Lake Washington and Union Bay Shorelands.

In 1910—Laurelhurst (Yesler, Ferguson, Keith), Georgetown (Duwamish, Sommerville).

In 1921—Hillman City, a precinct south of Columbia surrounded by territory annexed in 1907. Finally included in the city by virtue of a state law of 1921 which compelled any community entirely surrounded by a city to become part of it.

In addition to the shorelands above noted other reclaimed lands were added to Seattle:

Area around Alki Point.

Harbor Island and land bordering on the East and West Waterways.

The fill at Smith's Cove.

Land along the canal between Lake Union and Puget Sound.

Area around Lake Union.

Old channels of the Duwamish River.

After the first annexations of 1891 took place, it was found that there were a great many duplications in street names. For example, there were three California and Columbia Streets, four Elliott and Second streets, five Cedar Streets and no less than six Sixth Streets. Also different portions of the same continuous street had different names. For instance Pike Street as it proceeded eastward became Choate Street, then Blakely Street, then Choate Street again, then Johnson Avenue, and finally at the lake, Michigan Street. In 1895 the city council therefore decided to rename the streets according to a plan whereby generally all north and south thoroughfares were called avenues and those east and west were designated as streets. Prefixes and suffixes were added to denote location, such as East Fiftieth Street and First Avenue North. This system is in effect today.

SEATTLE WATERFRONT FROM BEACON HILL, ABOUT 1881
Illustrating Great Circle of Tidelands, Since Filled

FIRST EVENTS IN SEATTLE AND KING COUNTY

In the early history of this region, happenings which in more settled communities would have been commonplace, assumed a certain degree of importance as the first events of their kind in Seattle and King County. In the belief that they will be of interest in tracing the development of this area these historical milestones are here submitted in chronological order. Excluded are most references to roads, bridges, wharves, plats, etc. which will be found in the sections devoted to each. Unless otherwise stated these events apply to both Seattle and King County.

1851

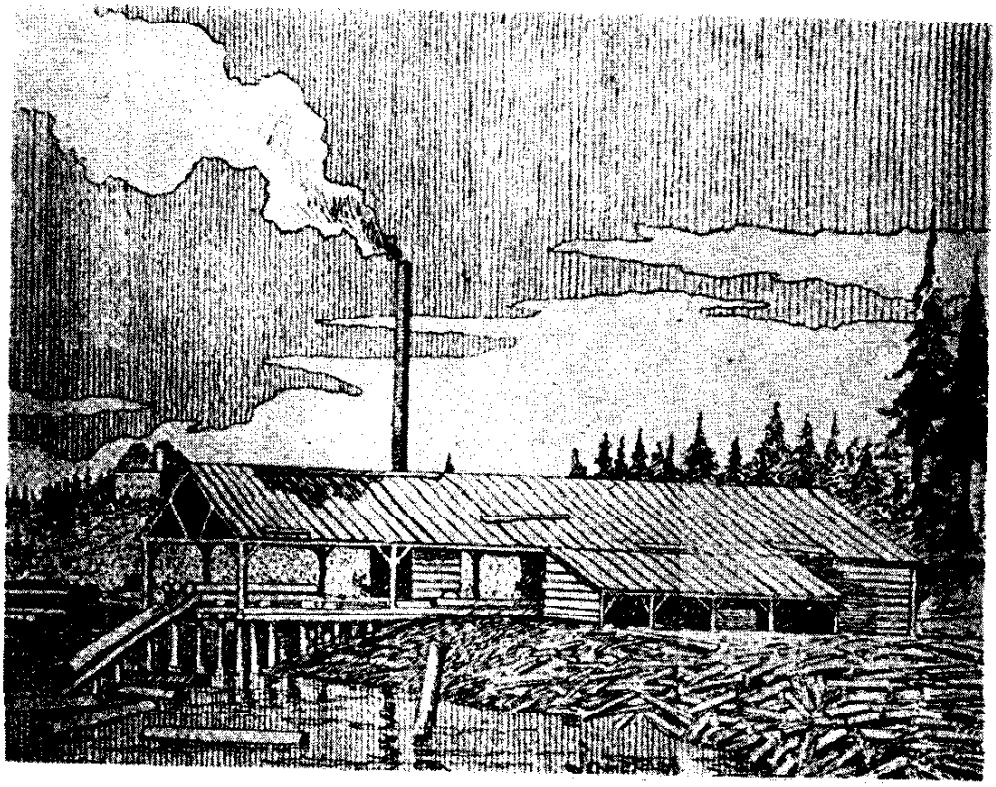
First settlement in King County: L. M. Collins, H. Van Asselt and Jacob and Samuel Maple on Duwamish River, September 15th.
First oxen brought to King County: L. M. Collins, from Nisqually.
First white women to arrive in King County: Mrs. L. M. Collins and daughter.
First mercantile enterprise in King County: New York Trading Company (Charles C. Terry) at Alki.
First house built in King County: For J. N. Low at Alki.
First salmon business in King County: Capt. Robert C. Fay at Alki.
First steamer to ply the Puget Sound: The "Beaver," a British vessel.

1852

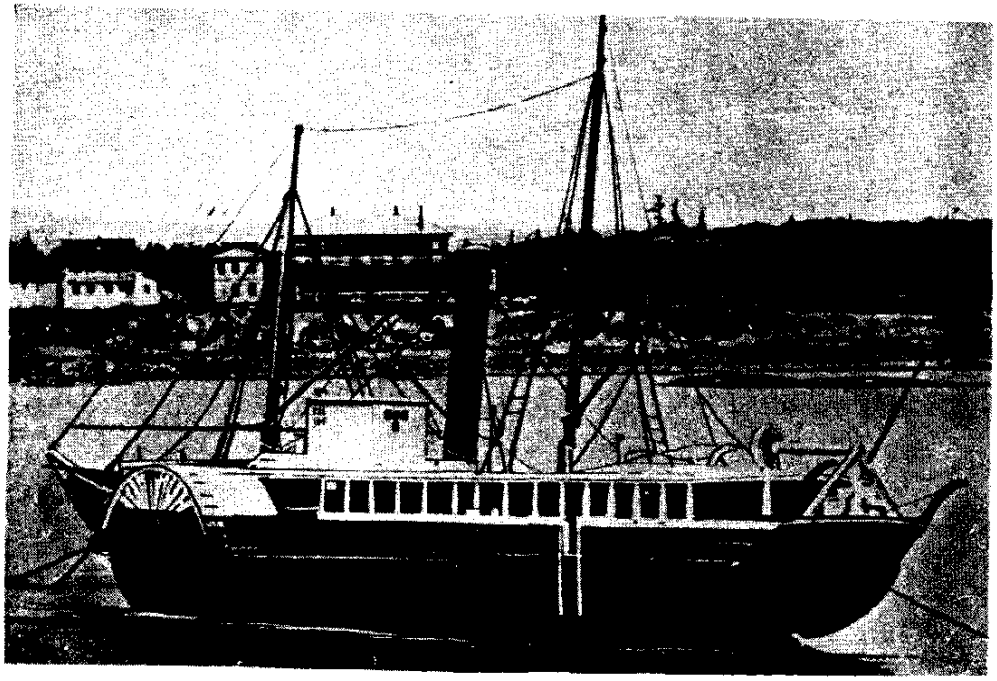
First settlement in Seattle: W. N. Bell, C. D. Boren and A. A. and D. T. Denny, February 13th.
First house built in Seattle: C. D. Boren, at Cherry Street and Second Avenue across from the Alaska Building.
First salmon business in Seattle: Dr. D. S. Maynard.
First store in Seattle: Seattle Exchange (Dr. D. S. Maynard) at First Avenue South and Main Street in April.
First vessel to load at Seattle: Brig. John Davis, Capt. George Plummer, in April.
First white female child born in Seattle: Daughter of George McConaha, on September 18th.
First divorce in King County: Dr. D. S. Maynard by the Oregon Legislature. December 2nd, from the wife he had left in the east.
First donation claims filed in King County: C. D. Boren, W. N. Bell, A. A. and D. T. Denny.
First religious service: By Bishop Demers, a Catholic.
First lawyer: George McConaha.
First steam sawmill in King County: H. L. Yesler, at First Avenue and Yesler Way.
First marriage in King County: Between John Bradley and Mary Relyea of Steilacoom and performed by Dr. D. S. Maynard, Justice of the Peace.

1853

First marriage certificate issued in King County: Attested by Dr. D. S. Maynard, Justice of the Peace, who performed the ceremony uniting D. T. Denny and Louisa Boren, with H. L. Yesler, Clerk, as witness, on January 23rd.
First county officials appointed by Oregon Legislature: J. N. Low, L. M. Collins, and A. A. Denny as Commissioners, H. L. Yesler, as Probate Clerk, and C. D. Boren as Sheriff.
First meeting of Board of King County Commissioners: March 5th.
First paper recorded in King County: Donation claim of D. T. Denny.
First recorded deed in King County: From C. D. Boren to William A. Strickler for sale of property for $1,000.00 on July 12th.
First white male child born in Seattle: Orion O., son of A. A. and Mary A. Denny, on July 17th.
First discovery of coal in King County: By Dr. R. M. Bigelow on the Black River not far from Renton.



YESLER'S FIRST SAWMILL



"BEAVER"—FIRST STEAMER ON PUGET SOUND

First schoolhouse in King County: At Van Asselt's Claim.
First waterfront improvement in Seattle: Yesler's Wharf at the foot of Yesler Way.
First white woman to explore Lake Washington: Mrs. D. S. Maynard.
First postmaster for Seattle: A. A. Denny, and first direct mail received on August 27th.
First grand jury for King County: December 5th.
First teamster in Seattle: Thomas Mercer.
First blacksmith shop: Started by Dr. D. S. Maynard at First Avenue South and Washington Street and later turned over to L. V. Wyckoff who made the first plow for W. N. Bell.
First hotel: The Conklin operated by Mary Ann Boyer at Main Street and First Avenue South.
First public dining rooms: Operated by David Maurer at the residence of Dr. D. S. Maynard.
First American steamboat to arrive on Puget Sound: The "Fairy."
First King County census: Population 170 whites.
First election in Seattle: For delegate to Oregon Territorial Legislature. A. A. Denny elected.

1854

First county officials appointed by Washington Legislature: Thomas Mercer, G. W. W. Loomis and L. M. Collins as Commissioners, W. A. Strickler as Probate Judge, C. D. Boren as Sheriff, H. L. Yesler as Auditor, William P. Smith as Treasurer, H. A. Smith as Superintendent of Schools, John C. Holgate as Assessor, J. A. Chase, S. L. Grow and S. W. Russell as Justices of the Peace, B. L. Johns, L. B. Simons and J. N. Roberts as Constables.
First county officials elected: Thomas Mercer, C C. Lewis and Alfred Savage as Commissioners, Thomas S. Russell as Sheriff, John Henning as Assessor, Henry Adams as Auditor, H. A. Smith as Superintendent of Schools, W. N. Bell as Coroner, S. B. Hines as Wreckmaster and A. A. Denny as Washington Territorial Representative—all on September 4th.
First county road district supervisor: L. M. Collins, June 10th.
First county surveyor: William A. Strickler, July 6th.
First drugstore: Horace Morse at Main Street and First Avenue South.
First water system: Built by H. L. Yesler, to supply his mill.
First private school in Seattle: Provided by William A. Strickler at Bachelor's Hall.
First school teacher: Mrs. Catherine Blaine, wife of
First resident minister: Rev. David E. Blaine, who established
First church: Methodist Episcopal at Columbia Street and Second Avenue.
First license to keep a bar and maintain a bowling alley: Plummer and Chase.

1855

First relief case in King County: Charlie Hanson, January 16th.
Territorial Militia provided for by legislature: January 1855.
First fruit trees in Seattle: Planted by Rev. D. E. Blaine at his home, Cherry Street and Second Avenue, from seeds brought from New York.

1856

First board of equalization in King County.
First county attorney: Isaac M. Hall, salary $200.00 per year.
First tannery and boot and shoemaker: M. D. Woodin & Son at Yesler Way and Third Avenue.

1857

First election of delegate to Congress: June 8th.

1859

First entertainment hall: Plummers Hall at First Avenue South and Main Street.

First meat market: George F. Frye and A. A. Denny.
First earthquake after American settlement.

1860

Seattle Library Association formed, on January 10th.
First donation claim title to be perfected in King County: By D. T. Denny.
First journey from Oregon to Seattle by horse and buggy: The Bagley family.
First county building: Leased from H. L. Yesler, on Third Avenue between Jefferson Street and Yesler Way.

1861

First policeman: W. H. Surber.
First shipyard: George Austin, at foot of Marion Street.
First heavy winter: Temperature down to 4 degrees below zero, ice on the lake six inches thick, snow fell to a depth of two feet.

1862

Lath and plaster construction first introduced in Seattle.
First foundry: John Suffern.

1863

First hospital in Seattle: Established by Dr. D. S. Maynard and wife, located in their home on First Avenue South, between Main and Jackson Streets.
First newspaper in King County: Seattle Gazette, established by James R. Watson of Olympia, on December 10th.
First annual fair of the King County Agricultural Society.
First tailor shop: John Welch (mostly repairs).
First brickyard: Plummer and Chase.

1864

First telegraph line to reach Seattle: California State Telegraph Company branch of Western Union Telegraph Company, on October 26th.
First Railroad Company to be chartered in King County: The Seattle and Squak Railroad Company, by the legislature, to carry coal from Issaquah.
First flour mill: H. L. Yesler.
First commercial bakery: Eureka Bakery owned by Terry and Green, at First Avenue South, near Washington Street.
First brewery: Schmeigs, at First Avenue and Columbia Street.

1865

First charter of town of Seattle: Repealed two years later, and re-enacted in 1869.
Seattle Brass Band first established.
First millinery store: Mrs. S. D. Libby and Mrs. O. C. Shorey.
First brass and iron works: Thomas Martin.

1866

Highest temperature recorded: In June, 114 degrees in the shade.
First daily newspaper in Seattle: The Puget Sound Daily, founded by Isaac M. Hall and Hugh McNamara, selling at 10 cents per copy; but ceased publication in a few months.
First cracker factory: C. C. Terry.
First barber shop: Archie Fox.

1867

First railroad in King County: Coal Creek Road Company, a three-mile stretch along Coal Creek—a coal raliroad.
First regular ocean steamship line betwen Seattle and San Francisco.
First Chinese businessman: Chen Cheong, a cigar manufacturer.

1868

Worst dry spell. No rain between first of July and last of October. Worst forest fires known up to that time.
First stone building: Dexter Horton Building at First Avenue South near Washington Street.
First organized cooperage industry: R. C. Graves on First Avenue.
First furniture store: Russell and Shorey.
First real estate office: L. B. Andrews .

1869

First iron discovered: By A. A. Denny and party in the Snoqualmie region.
First gas franchise: To a group of Seattle citizens, who incorporated on August 11th.
First wholesale business: Schwabacher Bros. and Company.

1870

First public school in Seattle: At Third Avenue and Madison Street.
Seattle Volunteer Fire Company organized; as a department in 1875.
First soap business: J. J. Moss.
First bank in Seattle: Founded by Dexter Horton, under the firm name of Phillips Horton Company at Washington Street and First Avenue South.

1871

Seattle Pioneers Society organized.
First horse stage in Seattle—From Seattle to Lake Washington along what is now Yesler Way.
First wagon builder: Vitus Schmid.

1872

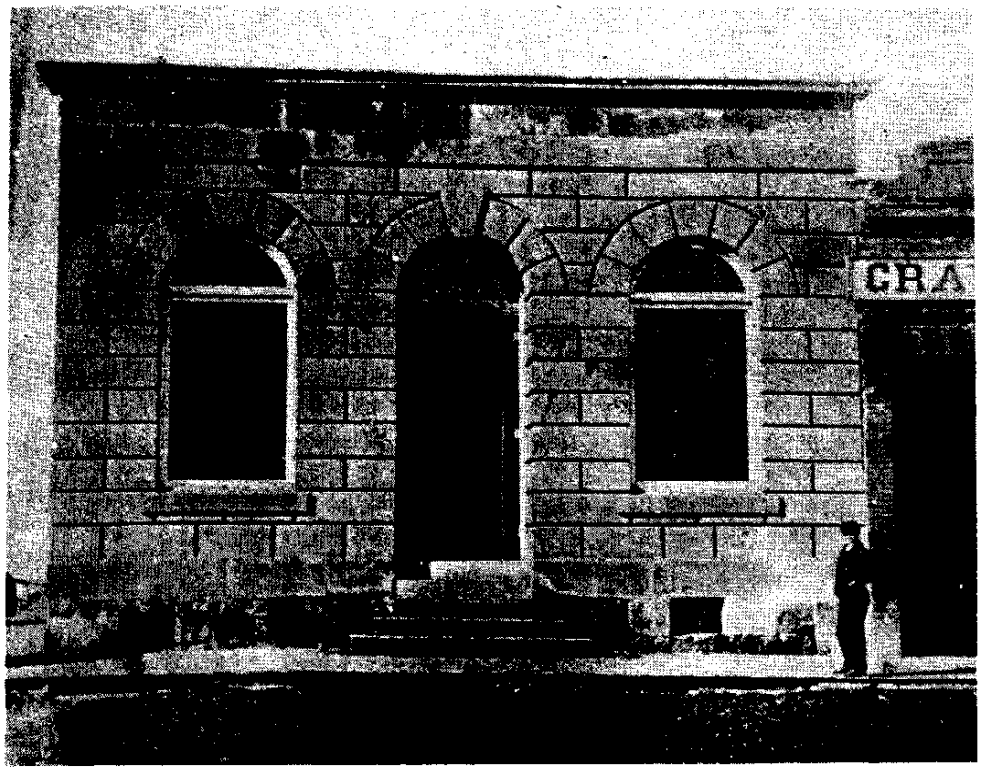
First railroad in Seattle: Coal railroad of the Seattle Coal and Transportation Company from Lake Union to the foot of Pike Street.
First ice dealer: Capt. Marshall Blinn (shipped ice in from the Sierras).
First brick building in Seattle: Schwabacher Bros. and Company.
First wood working factory: Lord and Hall on First Avenue South.

1873

Gas first lighted Seattle streets on December 31st.
Philharmonic and Choral Society formed.
First official King County printed stationery in use.
First reading rooms: Seattle Library and Reading Rooms at Pioneer Suqare.

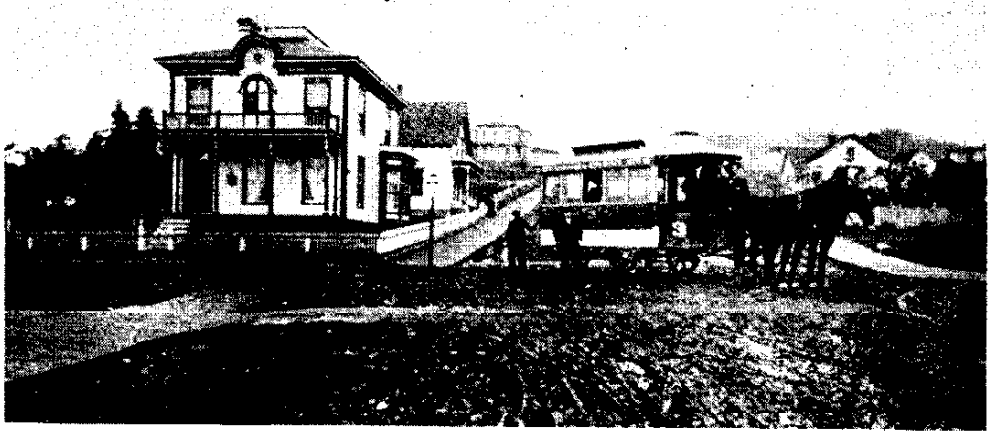
1875

Worst gale in history of Seattle, with great damage.
First furniture factory: Hall and Graves.

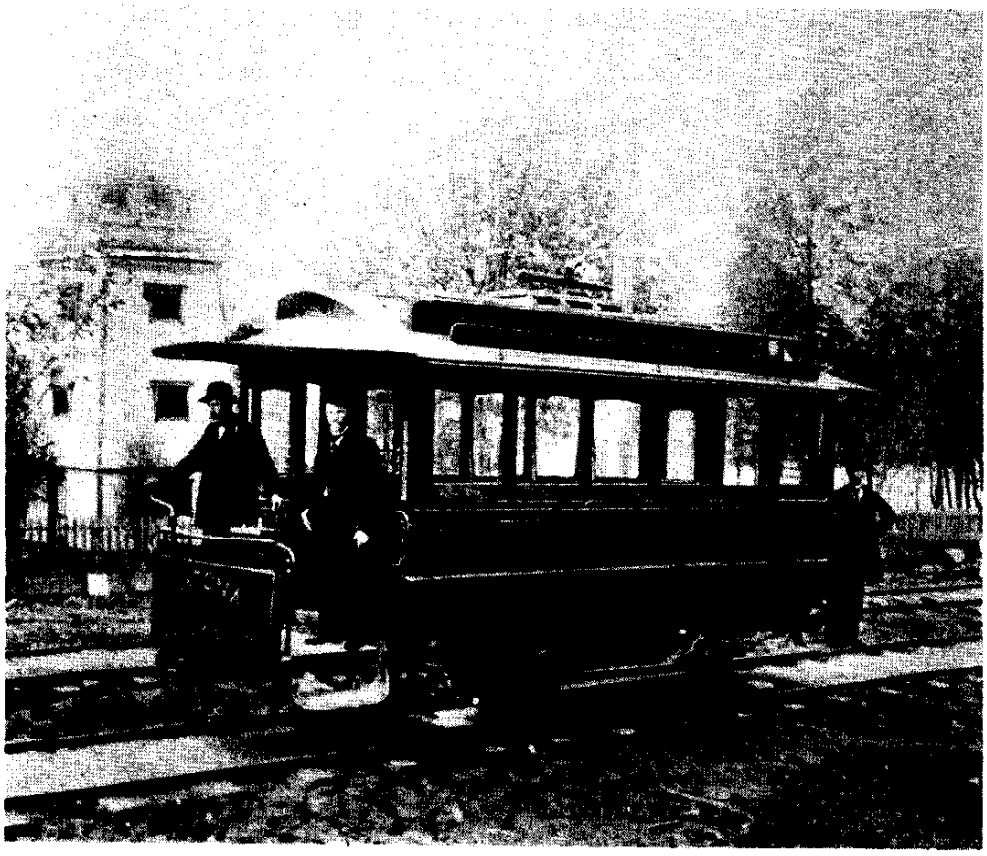


FIRST STONE BUILDING IN SEATTLE ABOUT 1868
Dexter Horton's at First Avenue South near Washington Street

FIRST HORSE STAGE IN SEATTLE ABOUT 1871



SEATTLE'S FIRST HORSE CAR, ABOUT 1883



SEATTLE'S FIRST ELECTRIC CAR, ABOUT 1889

1876

First telephone: From Seattle to West Seattle, installed by F. H. Lamb, Superintendent of the Telegraph Company.
First Y. M. C. A.: Organized at Mrs. D. S. Maynard's home, and its first location was at First Avenue and Madison Street.
First Seattle directory: Wards Business Directory of Seattle.
First Seattle baseball team: The Alkis.
First railroad ordinance in Seattle: No. 85, passed January 25th, though the first coal railroad ordinance numbered 55 was issued May 5th 1874 for the Seattle Coal and Transportation Company.

1877

Seattle Rifle Team organized.

1879

First Seattle ordinance authorizing building of street railways to be drawn by horses or mules (Franchise granted to D. T. Denny and George Kinnear).
Seattle Chess Club organized.
First theatre in Seattle: Squire's Opera House at Washington Street and First Avenue South.

1880

First hack: Owned by John Hildebrand.
Worst snowstorm in Seattle, four feet deep.

1881

First electric franchise: To Bailey Gatzert, George Rowe, and George W. Harris.
First woman preacher: Mrs. A. W. Jones.

1882

First ice-making plant: Next to the Centennial Mills, foot of Marion Street.
First steamer to cross Pacific from Seattle: "Madras," British vessel, 2,500 tons.
First King County owned Court House: At Third Avenue and Jefferson Street.
First Seattle City Hall: Second Avenue South, between Yesler Way and Washington Street.
First pipe organ: Church of Our Lady of Good Hope.
Seattle Chamber of Commerce organized on April 17th.

1884

First telephone exchange opened in Seattle: Sunset Company on March 7th.
First horse-cars: Seattle Street Railway (Frank Osgood) built about three miles of track, Second Avenue to Pike Street to First Avenue to Battery Street, with branch from Pike Street to Lake Union.
First charitable organization: Ladies Relief Society.

1887

First Justice of the Peace in King County: Eliza A. Forbes February 23rd.

FIRST KING COUNTY COURT HOUSE

OLD AND NEW CITY HALL, SEATTLE
The old City Hall in Foreground is the First King County Court House with many Additions

1888

King County Medical Society organized.
First Seattle ferry: "City of Seattle" from Seattle to West Seattle.
First cable railway: Built by Fred E. Sander and associates, from Yesler Way and Occidental Avenue to Lake Washington, and return via Jackson Street.

1889

Seattle Clearing House Association organized.
First electric street railway: Seattle Electric Railway and Power Company line running on Queen Anne Avenue through North Seattle.
The year of the big fire in Seattle.

1890

Commissioners districts first defined as Nos. 1, 2 and 3, August 26th.
First community newspaper: West Seattle Gazette, issued in June.

1891

First dry dock in Seattle: Moran Brothers Company, who built the Seattle Drydock.
Seattle Public Library first officially organized.

1892

First woolen mill: Established at Kirkland (Seattle Woolen Mill Company).

1893

First King County Hospital: Built in Duwamish Valley, now known as County Farm.
First Great Northern Railway train to come to Seattle.
First eight-hour day for county employees: January 25th.

1894

First Y. W. C. A. organized: At Third Avenue and Columbia Street.

1896

Seattle and Renton Railway Company formed, becoming the longest electric railway in the State.
Arrival of first freight liner from Japan to Seattle.

1900

First motor car in Seattle was an electric.
First community club in King County: Renton Hill Improvement Association.

1904

First steel manufactured in Seattle: Seattle Steel Company (William Pigott).
First steel vessel built: Moran Brothers Company.

1906

First municipally owned railway system: Owned and operated by the town of West Seattle, and the only one at that time in the United States.

KING COUNTY POPULATION TABLES

(1851-1939, Inclusive)

From a population of 170 whites in 1853, the county has grown to an estimated 507,194 in 1936, with Seattle accounting for most of this increase. All figures are from the U. S. Census, excepting those given for inter-decennial periods, the authority for which is shown. A distribution of the county population falls into two divisions: incorporated cities, including Seattle, and all other communities. For unincorporated towns and other settlements, no federal figures are avaliable; but since 1900 the census has been taken by precincts, most of which include a number of settlements within their boundaries. Listing population by precincts gives an indication of the growth of the settled areas in King County.

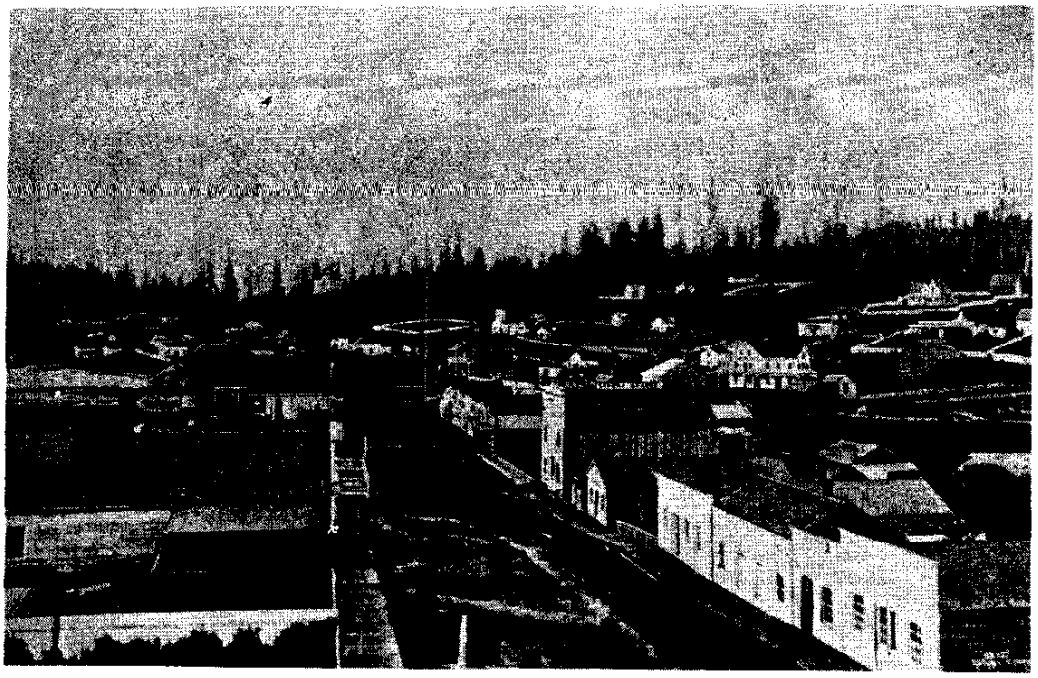
TOTAL KING COUNTY POPULATION (1853-1936)

Year	*Population*	*Authority*
1853	170	Bagley's History of King County, 1929
1853	302	U. S. Census
	275	Bagley's History of Seattle, 1916
1861	304	Prosch's Chronological History of Seattle, 1901
1867	725	" " " "
1870	2,120	U. S. Census
	2,164	Bagley's History of Seattle, 1916.
1877	5,649	Prosch's Chronological History of Seattle, 1901
1880	6,910	U. S. Census
1887	15,942	Prosch's Chronological History of Seattle, 1901
		Bagley's History of King County, 1929
1889	40,788	Prosch's Chronological History of Seattle, 1901
1890	63,989	U. S. Census
1892	78,762	Prosch's Chronological History of Seattle, 1901
		Assessor's Census (70,000 to 80,000) in connection with change to second class county
1900	110,053	U. S. Census
1910	284,638	"
1920	389,273	"
1930	463,517	"
1936	507,194	Community survey by the Wash. Dept. of Social Security, 1938

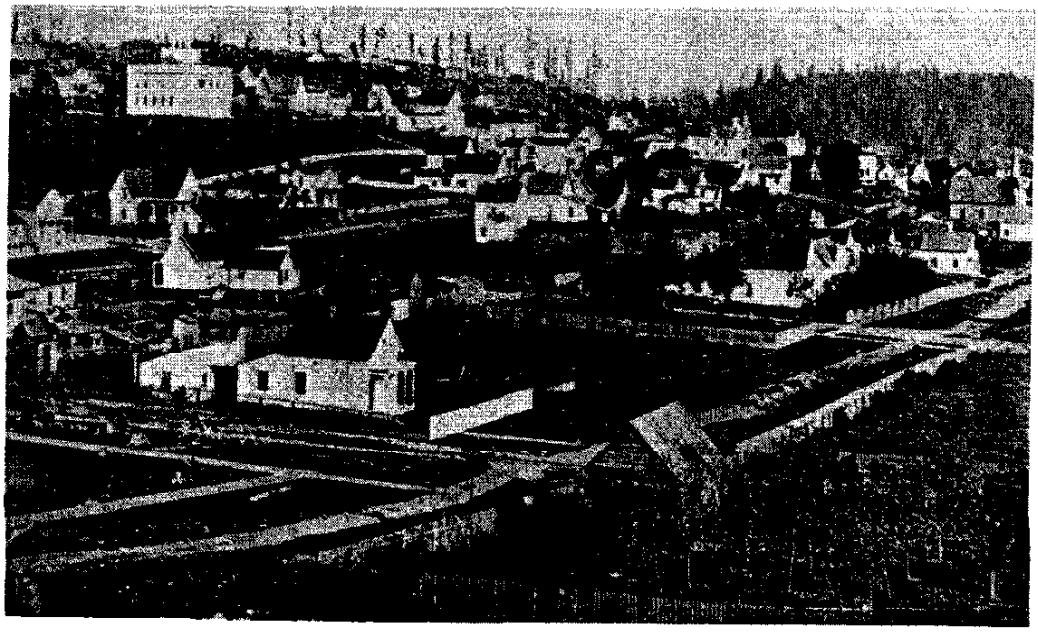
POPULATION OF INCORPORATED CITIES (Excluding Seattle)

City	*Incorp.*	1890	1900	1910	1920	1930	*Remarks*
Auburn	6- 1-1891	740	489	957	3163	3906	At first Slaughter; became Auburn '93; became 3rd class city 1913
Bothell	4-12-1909	.....	.....	599	613	818	
Carnation	12-30-1912	.....	*227	*394	536	360	At first Tolt ;became Carnation '17
Duvall	1- 6-1913	.....	.....	.....	258	200	
Enumclaw	1 27 1913	.....	*483	*1129	1378	2084	Became 3rd class city 1934
Issaquah	4-25-1892	.....	700	628	791	736	At first Gilman; became Issauah '99
Kent	5-26-1890	853	755	1908	2282	2320	Became 3rd class city 1907-1908
Kirkland	10- 9-1905	.....	*392	532	1354	1714	Became 3rd class city 1936
North Bend	3- 1-1909	.....	.....	299	387	548	
Pacific	8- 2-1909	.....	.....	413	320	347	
Ravensdale	8- 4-1913	.....	.....	*726	159	109	
Redmond	12-30-1912	.....	.....	*790	438	460	
Renton	9- 3-1901	.....	*1176	2740	3301	4062	Became 3rd class city 1908
Skykomish	6- 2-1909	.....	.....	238	267	562	
Snoqualmie	5-29-1903	.....	*429	279	450	752	
Tukwila	6-16-1908	.....	.....	361	453	424	

*Population of Precinct before incorporation.



SEATTLE EARLY IN 1865
From Main Street and First Avenue South looking North



SEATTLE ABOUT 1870
From Third Avenue and Pike Street Looking South

SEATTLE'S POPULATION (1851-1939)

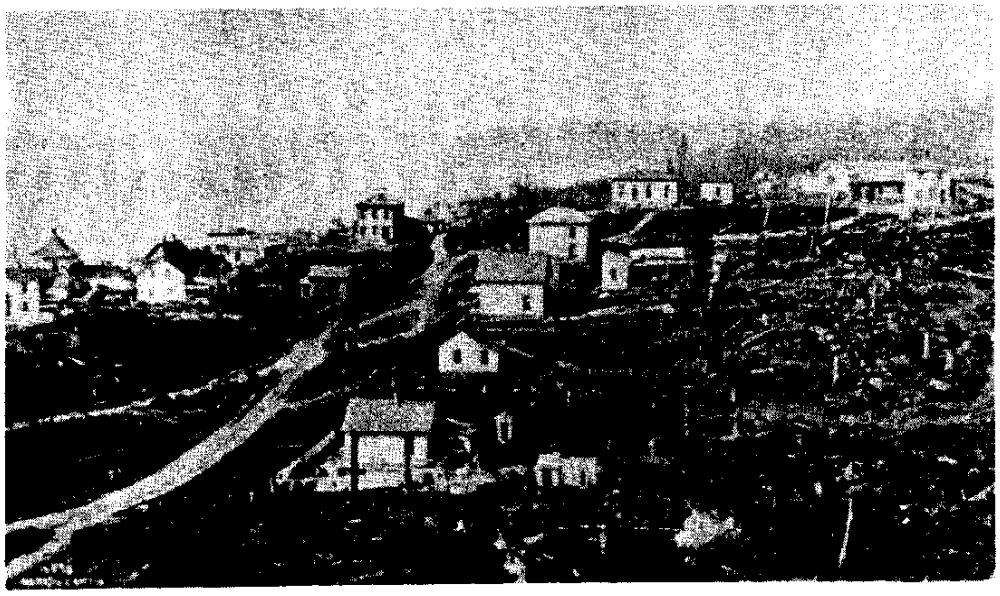
As stated previously in this report Seattle was first incorporated as a town on January 14, 1865, disincorporated at the next session of the legislature and finally reincorporated as a city on December 2, 1869. While it assumed the lead among the cities of the State of Washington, no official classification was made until 1890 when the state graded cities according to population. It was then that Seattle was declared a city of the first class, which it has remained ever since.

Year	*Population*	*Authority*
1851	24	Grants History of Seattle, 1891
1854	210	Hanford's Seattle and Environs, 1924
1855	150	Clarence B. Bagley
	300	Ward's Business Directory of Seattle, 1876
1860	182	Bagley's History of Seattle, 1916
	250	U. S. Census
1863	250	Clarence B. Bagley
1864	300	*Beaton's City That Made Itself*, 1914
1865	350	Bagley's History of Seattle, 1916
1866	400	Clarence B. Bagley
1867	400	Ward's Business Directory of Seattle, 1876
1869	1,000	Bagley's History of Seattle, 1916
1870	1,107	U. S. Census. Bagley's History of Seattle, 1916
	1,142	Bagley's History of Seattle, 1916
1871	1,300	" " "
1872	1,800	Murphy & Harned's Puget Sound Business Directory, 1872
	2,000	Ward's Business Directory of Seattle, 1876
1874	1,350	Clarence B. Bagley
1875	1,512	Bagley's History of Seattle, 1916
1876	3,700	Ward's Business Directory of Seattle, 1876
		Bagley's History of Seattle, 1916 (including Chinese, Indians and floating population)
1878	4,681	Choir's Pioneer Directory of Seattle and King County, 1878
1880	3,533	U. S. Census
1882	4,000	Pacific Northwest—Oregon and Washington Territory, 1882
	5,000	Disturnell's Business Directory and Gazetteer of the West Coast of North America, 1882
	6,000	McKenney's Pacific Coast Directory, 1883-4
1883	6,645	Territorial Census. Prosch's Chronological History of Seattle, 1901
1885	9,786	Assessor's Census. Prosch's Chronological History of Seattle, 1901
1887	12,167	Prosch's Chronological History of Seattle, 1901
1888	19,116	Territorial Census. Prosch's Chronological History of Seattle, 1901
1889	26,740	" " " "
	33,500	Assessor's Census. Polk's Seattle Directory, 1890
1890	42,837	U. S. Census
1900	80,671	"
1910	237,194	"
1920	315,685	"
1930	365,583	"

KING COUNTY POPULATION—BY PRECINCTS—(1900-1930)

These figures are taken from the U. S. Census, the first of which, by precincts, is for 1900. Precincts formed prior to that date are noted as "Existing" in the column headed "Formed from Precinct."

Precinct	*Formed From Precinct*	*Communities in Precinct*	1900	1910	1920	1930	*Remarks*
Aaron	Valley		.....	268	456	600	West of Auburn
Adelaide	Existing		103	319	329	272	North of Milton; changed to Edgewood 1910-20; to Harding 1923; part to Jovita 1923
Albin	Existing		94	140	153	.....	Annexed to Fall City 1922
Algona	Stuck	Algona	.....	.....	1072	1209	
Alpine	Martin-Baring		.....	.....	223	4	Formed 1912; added to Martin Creek, 1930
Arbor Heights	Endolyne	Suburban	.....	.....	.....	566	Formed 1923
Arthur	Existing	Maple Valley	240	216	211	242	Part to Hobart 1900-10
Avondale	Existing	White	195	272	279	358	Part to Hollywood 1900-10
Bagley	North Bend		.....	34	.....	.....	Merged into Cedar Falls-Sherwood 1910-20
Baring	Martin Creek	Baring	.....	140	71	109	Part to Alpine 1913
Barneston			.....	157	231	.....	Added to Sherwood 1923
Bayne	Palmer	Bayne	.....	.....	198	45	
Bellevue	Existing	Bellevue-Midlakes	254	566	878	1071	Part to Enatie-Boddy 1910-20; divided into Bellevue No. 1—No. 2 after 1930
Berlin	Martin Creek	Grotto-Miller River	.....	160	46	154	
Birch	Existing	Veazie	108	200	213	195	
Black Diamond	Existing	Blk Diamond-Kummer-Lawson	1726	2051	1711	1388	Town population 561 in 1890; part to Ravensdale 1900-10; divided Blk. Diamond No. 1—No. 2 1910-20
Black River	Existing	Bryn Mawr	63	519	505	839	Part to Bossert-Earlington 1910-20; named changed to Bryn Mawr after 1930
Boddy	Bellevue	Hunt's Point-Yarrow	.....	.....	397	600	
Boise	Existing	Boise	163	272	321	355	Part to Ellinson 1910-20
Bossert	Black River		.....	.....	185	199	
Bothell	Existing	Wayne	.....	328	996	1216	Town and precinct as one 1900; less town 1910; divided Bothell No. 1—No. 2 1910-20; part to Kenmore 1926
Broadview	Haller Lake	Suburban	.....	.....	.....	1046	Formed 1923; part to Bitter Lake after 1930
Buenna	Existing	Buenna-Lakota	84	134	188	278	
Burien	Seahurst	Burien	.....	.....	.....	1203	Formed 1922; part to Riverton 1929
Burton	Existing	Burton-Magnolia-Magnolia Beach	250	488	421	386	On Vashon; part to Island-Lizabuela 1910-20
Carnation	Tolt	Pleasant Hill-Horrocks	227	394	384	425	Town and precinct as one 1900-10; part to Stillwater 1913; less town 1920
Cedar Falls	North Bend	Cedar Falls	.....	93	489	201	See Bagley; absorbed Bagley 1910-20
Cedar Mt.	Existing	Cedar Mountain	119	156	209	327	Part to Elliott-Hobart 1900-10; to Coalfield 1910-20.
Cedar River	Renton	Talbot	.....	522	647	715	New name for part of Renton Precinct outside of town; part to Hillcrest 1923



BELLTOWN LOOKING NORTH FROM VIRGINIA, ABOUT 1875

SEATTLE, ABOUT 1878
Looking Northwest From Yesler's Wharf

KING COUNTY POPULATION—BY PRECINCTS—*(Continued)*

Precinct	*Formed From Precinct*	*Communities in Precinct*	1900	1910	1920	1930	*Remarks*
Chautauqua	Existing		240	.....	.....	.....	On Vashon; became Quartermaster 1900-10
Cherry Valley	Existing	Bacus	125	489	*343*	*352*	Less Duvall *1910-20*
Christopher	Existing	Christopher-Thomas-Meredith	269	635	822	1230	
Coalfield	See Remarks	Coalfield	.....	.....	264	209	From Cedar Mt.-Newcastle; part to Hillcrest 1923
Columbia	Existing		322	.....	.....	.....	Annexed to Seattle in 1907
Cove	Vashon	Cove	.....	355	387	*372*	On Vashon
Covington	Green River	Covington	.....	145	150	*228*	
Cumberland	Existing	Cumberland	*247*	585	*580*	*249*	
Des Moines	Existing	Des Moines-Zenith	162	357	751	1005	Population as a town 212 in 1890; part to Lake 1900-10; to Zenith after 1930
Dockton	Maury	See Remarks (On Vashon)	.....	.....	388	234	Dockton-Shore Acres-Northilla Beach-Manzanita
Dolphin	See Remarks	Vashon Hgts-Cedarhurst-Assembly Beach	.....	.....	176	249	On Vashon, formed from Vashon-Cove
Dunlap	Existing		*326*	.....	.....	.....	Part annexed to Seattle 1907
Durham	Existing	Durham-Trude-Kangley-Selleck	164	170	854	835	Part to Palmer 1900-10
Duwamish	Existing	Allentown	1913	652	860	951	Part annexed to Seattle 1907
Eagle Gorge	Existing	See Remarks	48	304	460	88	Eagle Gorge-Garibaldi-Baldi-Page Mill-Lemolo
Earlington	Black River	Earlington	.....	.....	408	549	
Ellinson	Enumclaw	Upper Mill	.....	198	359	226	Added part to Boise 1910-20
Elliott	See Remarks	Maplewood-Elliott	.....	*119*	139	240	Formed from Renton-Cedar Mountain
Enatie	Bellevue	Enatie-Beaux Arts	.....	.....	157	190	
Endolyne	Mt. View	Suburban	.....	.....	733	374	Part to Arbor Heights 1923
Enumclaw	Existing	Enumclaw Jct.	483	1129	615	777	Town and precinct as one 1900-10; part to Ellinson 1900-10; to town 1910-20; divided into N. & S. Wards 1920-30; became *Lincoln-Madison after 1930*
Fall City	Existing	Fall City and Fall City Sta.	377	555	599	908	Added Albin 1922
Foster	See Remarks	Foster	.....	.....	1025	609	From Sunnydale-White River-Fulton; part to Riverton Heights 1929
Foy	See Remarks	Foy	.....	.....	288	539	From Richmond-Greenwood; was Stuart; now Foy '26
Franklin	Existing	Franklin	421	326	242	18	Population as town 647 in 1890
Fruitland	Mercer		.....	.....	.....	98	*On Mercer Island. Formed 1922*
Fulton	Existing	Suburban	1156	498	519	1623	Part to Seattle remainder McKinley 1907; part to Riverton 1910-20; to Riverton Heights 1929; to Beverly-Beverly Heights-Jefferson after 1930
Gilman	Existing	High Point	360	556	1026	906	Population as town 1900; absorbed Squak 1930
Green River	Existing	Green River	129	231	110	114	Part to Covington 1900-10
Greenwood	See Remarks	Richmond Highlands-Ronald	.....	*482*	*723*	*1437*	*From* Richmond-Union; part to Echo Lake-Ronald '30
Haller Lake	See Remarks	Suburban	.....	.....	592	484	From Oak Lake-Maple Leaf; part to Broadview 1923
Happy Valley	Redmond	Adelaide	.....	.....	.....	210	Formed 1922
Hazelwood	See Remarks		.....	.....	123	199	From Kennydale-Newcastle
Highland	Houghton		.....	.....	168	395	
Hill			.....	.....	373	.....	Annexed to Seattle 1921

KING COUNTY POPULATION—BY PRECINCTS—*(Continued)*

Precinct	*Precinct Formed From*	*Communities in Precinct*	1900	1910	1920	1930	*Remarks*
Hillcrest	See Remarks					422	From Cedar River-Coalfield-Newcastle 1923
Hobart	See Remarks	Hobart		279	668	643	From Arthur-Cedar Mt.
Hollywood	See Remarks	Hollywood			286	440	From Woodinville-Juanita-Avondale-Redmond
Hot Springs	Existing		49	54	8		Part to Maywood 1900-10; added to Lester 1920-30
Houghton	Existing	Houghton-Northrup	217	270	327	471	Part to Highland 1910-20
Inglewood	Monohon	Inglewood-Sammamish		230	204	217	
Island	Burton	Harbor Hgts.-Tahlequah-Springs Bch.			68	69	On Vashon Island
Jovita	Harding					176	Formed in 1923
Juanita	Existing	Juanita-Firloch	186	471	694	1203	Part to Hollywood 1900-10; to Jackson after 1930
Kenmore	See Remarks	Kenmore				554	From Bothell No. 2—Lake Forest; part to Moorlands 1930
Kennydale	Newcastle	Kennydale-Colman		525	646	774	Part to Hazelwood 1920-30
Kerriston	Sherwood	Kerriston			134	63	
Kirkland	Existing	York	392	209	1194	1452	Precinct and town as one 1900; less town 1900-10; changed to Rosehill with part of Juanita 1910-20; became Wilson, Rosehill No. 1-No. 2 after 1930
Krain	Existing	Krain	254	321	449	436	
Lake	See Remarks			100	146	317	From Des Moines-White River-Sunnydale
Lake City	Haller Lake	Suburban			326	1304	Added part Union 1920-30; part to Van Burien 1930
Lake Forest	Maple Leaf	Lake Forest Park			543	1624	Added part of Kenmore 1926; part to Taylor-Polk-Zirconia after 1930
Lakeview	Mercer				92	89	On Mercer
Lester	Existing	See Remarks	308	405	274	238	Lester-Hot Springs-Borup-Kennedy-Stampede
Lisabuela	Burton	Lisabuela			201	195	On Vashon
McGilvra	Mercer	Roanoke			289	438	On Mercer
Manhattan	Sunnydale	Seacoma				220	Formed 1922
Maple Leaf	Union	Suburban		581	871	2771	Part to Haller Lake-Lake Forest 1910-20; to Morningside 1922-1926; now New Maple Leaf No. 1-No. 2, part to Licton Spr.-Victory Hgts.-Yarbo-Buchanan-Sunrise 1930
Martin Creek	Existing	Alpine-Tunga-Corea	417	234	12	344	Less Skykomish town 1900-19; part to Alpine 1913
Maury	Existing	Maury-Mileta	160	408	275	260	On Vashon; part to Dockton 1910-20
Maywood	Hot Springs	Maywood-Nagrom-Humphrey		49	351	46	
Meadow Point	Oak Lake	Suburban			890	1798	Part to Blue Ridge-Crown Hill after 1930
Medina	Bellevue	Medina		350	440	535	
Meeker	Existing		445	667	872	1394	Part to Russell after 1930
Mercer	Existing	East Seattle	61	449	530	444	On Mercer; part to Lakeview-McGilvra 1910-20; to Fruitland 1922
Meridian	Existing		142	447	514	332	
Monohon	Existing	Monohon	259	352	332	386	Part to Inglewood 1900-10
Morningside	See Remarks	Suburban				1655	From Lake City-Maple Leaf-Union 1922; from Maple Leaf again 1926; part to Urbana-Chelsea after 1930

SEATTLE ABOUT 1887
First Avenue Looking North From Madison

FREMONT IN 1902

KING COUNTY POPULATION—BY PRECINCTS—*(Continued)*

Precinct	*Formed From Precinct*	*Communities in Precinct*	1900	1910	1920	1930	*Remarks*
Mount View	Sunnydale	Bagley-White Center	.....	234	1021	1733	Part to Endolyne 1910-20; to Sylvan-Lakewood-Wynona after 1930
Muckleshoot	See Remarks		.....	.....	236	504	From Valley-Osceola; before 1920 Indian Reservation
Newcastle	Existing	Newcastle-Coal Creek	684	834	894	348	Part to Newport-Kennydale 1900-10; to Coalfield 1910-20; to Hillcrest 1923
Newport	See Remarks	Newport	.....	54	107	159	From Bellevue-Newcastle; part to Hazelwood 1910-20
North Bend	Existing	Meadowbrook	449	297	339	454	Population less town 1910
North Park	Oak Lake	Suburban	.....	.....	2255	1420	Part to North Trunk-Woodland 1924; to Zenia-Evanston after 1930
North Riverton	Riverton		.....	.....	.....	249	Formed 1920
North Trunk	North Park	Suburban	.....	.....	.....	712	Formed 1924
Novelty	Existing	Novelty	184	356	202	215	
Oak Lake	Existing	Suburban	214	1423	1459	2250	Part to Meadow Point 1900-10; to Haller Lake-North Park-Meadow Point 1910-20; to Panola-Johnson '30
Orillia	Existing	Orillia-Renton Jct	243	440	544	1026	
Osceola	Existing	Osceola	142	282	336	509	Part to Muckleshoot before 1900
Pacific	Existing	Stuck	153	814	26	85	Called Stuck to 1920; less Pacific town 1910-20; part to Algona 1920
Palmer	Durham	Palmer-Kanaskat	.....	214	145	120	Part to Bayne 1910-20
Pass	Existing		.....	54	167	.....	Added to Tanner in 1920-30
Preston	Existing	Preston-Lovegren Mill	251	457	492	505	
Quartermaster	Chautauqua	Quartermaster-Portage-Ellisport-Chautauqua-Vashon Center	.....	524	361	452	On Vashon Island; formerly Chautauqua Precinct
Ravenna	Union	Suburban	.....	.....	.....	2059	Formed 1920; part to Senora-Sand Pt. after 1930
Ravensdale	See Remarks	Danville-Georgetown-Ravensdale-Landsberg	.....	726	28	324	From Webster-Blk. Diamond; Precinct and town as one 1910; less town 1910-20
Redmond	Existing		271	790	734	737	Part to Hollywood 1900-10; precinct and town as one 1910; less town 1920; part to Happy Valley 1922; to Cleveland after 1930
Redondo	Star Lake	Redondo-Stone Ldg.-Woodmont Bch.	.....	.....	.....	116	Formed 1923
Renton	Existing		1176	.....	.....	.....	Precinct and town as one 1900; incorporated 1901; parts became Cedar River-Elliott.
Richmond	Existing	Richmond Beach	162	467	687	803	Part to Greenwood 1900-10
Riverton	McKinley	Riverton	.....	.....	1035	677	Part to North Riverton 1920; to Riverton Hgts. 1929
Riverton Heights	See Remarks	Riverton Heights	.....	.....	.....	843	From Burien-Foster-McKinley-Riverton-Sunnydale 1929; part to Southern Hgts after 1930
Sammamish	.....	.....	429	.....	.....	.....	Not on early precinct maps; possibly part of Squak
Seahurst	Sunnydale	Seahurst-Inglesea	.....	.....	1159	989	Part to Burien 1922; to Crescent after 1930
Sherwood	Existing	Sherwood-Walsh-Taylor-Hemlock-Barneston-Iolanthe	165	959	422	259	Part to Kerriston 1910-20; absorbed Barneston 1923
Snoqualmie	Existing		429	227	149	441	Precinct and town as one 1909; less town 1910; part to Warren 1910-20

KING COUNTY POPULATION—BY PRECINCTS—*(Continued)*

Precinct	*Formed From Precinct*	*Communities in Precinct*	*1900*	*1910*	*1920*	*1930*	*Remarks*
Sprague			90	1198	.....	.....	Not on early precinct maps
Springbrook	Existing		212	488	464	478	Part to Swan Lake 1910-20
Squak	Existing		99	164	160	193	Maybe Sammamish 1900; added to Gilman 1930
Star Lake	Existing		65	152	158	171	Part to Zenith after 1930
Stillwater	Tolt	Stillwater-Stuart	.....	.....	300	164	Formed 1913
South Fork			94	.....	.....	.....	Not on early precinct maps
Stossel	Existing		9	.....	.....	.....	Added to Tolt (Carnation) 1913; *no report* 1910
Suise Creek	Existing		162	343	383	370	Absorbed Swan Lake after 1930
Sunnydale	Existing	Sunnydale	317	522	1219	954	Part to Mt. View-Lake 1900-10; to Seahurst 1910-20; to Manhattan 1922; to Riverton Hgts 1926; to Bow Lake after 1930
Swan Lake	Springbrook		.....	.....	83	76	Part to Springbrook 1920-30; merged into Suise Creek after 1930
Tanner	See Remarks	Ragnar-Bandera-Rockdale					
		Alice Creek-Garcia	.....	365	149	318	Formed with Bagley and Cedar Falls from North Bend prior to 1930
Union	Existing		133	243	1155	.....	Part to Richmond-Lake 1900-10; absorbed by Ravenna-Morningside-Lake City 1920-30
Valley	Existing		454	652	463	602	Part to Aaron 1900-10
Vashon	Existing	Vashon (Cn Vashon Is.)	294	647	524	583	Part to Cove 1900-10; to Dolphin 1910-20
Vincent	Existing		71	101	229	238	
Wabash	Existing	Wabash	161	267	357	438	
Warren	Snoqualmie	Snoqualmie Falls	.....	.....	1564	1729	
Webster	Existing	Henry Switch-Eddyville-Wilderness-Summit	196	196	223	258	Part to Ravensdale 1900-10
Wellington	Existing	Embro-Scenic-Tye	618	132	141	40	
West Seattle	Existing		570	.....	.....	.....	Annexed to Seattle 1907
White River	Existing	O'Brien	263	329	410	442	Part to Lake 1900-10
Wilburton	Bellevue	Wilburton	.....	335	286	258	
Woodinville	Existing	Woodinville	226	487	410	552	Part to Hollywood 1900-10
Woodland	North Park	Suburban	.....	.....	.....	1531	Formed 1924; part to Athena-Roosevelt after 1930
Wynochee	Green River	Wynaco	.....	.....	154	102	
Yesler	Existing		232	782	.....	.....	Annexed to Seattle 1910

CULTURAL AND GOVERNMENTAL PROGRESS OF KING COUNTY

(Including Seattle)

The early history of King County is closely interwoven with the development of the Puget Sound country as well as with the progress of Seattle. For years there were only isolated settlements here and there, Seattle being the largest unit. Up to its incorporation in 1869 it was under the jurisdiction of the county, and for the next ten years it was the only incorporated town therein. The old pioneers who advanced the cause of the city therefore benefitted the entire region as well, and their resourcefulness and vision are well-nigh incredible in the light of what has been accomplished. Not only did they display daring and initiative in providing themselves with the means of livelihood, but they were also mindful of the cultural aspects of their community.

The year 1853 found them already interested in the religious welfare of the settlement, as evidenced by the second paper recorded in King County, which was a conditional quit claim deed to a tract of land from D. S. Maynard to the Methodist Episcopal Church, dated July 25, 1853. This evidently did not materialize for later in the year C. D. Boren donated two lots for the same purpose, and when Rev. D. E. Blaine arrived he began work on what was the first church, dedicated in 1855. Prior to its erection, religious services had already been held, the first one by Bishop Demers, a Catholic, in 1852. Gradually churchmen of every faith arrived and houses of worship of nearly every denomination are now to be found in Seattle and King County.

School activities in the growing village were at first confined to those of a private character, the first such schoolhouse being called "Bachelor's Hall." About 1854 it seems that William A. Strickler, the first County Surveyor, provided these quarters then located at Columbia Street and First Avenue. By 1869 a school tax of eight mills was voted, land was purchased at Third Avenue and Madison Street from C. C. Terry, and the next year a two-story building was erected at a cost of $3,000.00 for the building and the lots, which thus became Seattle's first public school.

The first school in King County itself was established even earlier than Seattle's, as the particulars available would indicate. About 1853 a school was begun at Van Asselt's claim in the Duwamish area, now incorporated within the boundaries of the city. Two years later another was located at Thomas called the John Thomas Schoolhouse, after which others followed, the next one being at Renton until by 1870 there were twelve school districts in the county. Very early in the scheme of county government a superintendent of common schools was provided for, but not always was it possible to pay this official a proper salary. An interesting letter in this connection was written to the county commissioners by E. Carr, then superintendent of schools, who on June 6th, 1870 complained of receiving in some years even less than five dollars in coin, and asking the board to consider his situation.

The first institution of higher education that might have been established in Seattle was the Puget Sound University, to which group C. D. Boren in 1854 donated the land between Columbia and Seneca Streets and Sixth and Terry Avenues, provided a building would be erected. Not being able to raise the necessary funds for the purpose the land reverted to Boren. Were that institution built, together with the Territorial University founded later, they would have presented a solid front from Union to Columbia Streets and might effectually have blocked Seattle's expansion to the east.

On January 29, 1855, the legislature established a territorial university at Seattle, with a township of land granted by Congress in 1854. It also established a branch on Boisfort Plains in Lewis County to be on an equal footing with that in Seattle.

King County to E. Carr Dr.
To 1 Years Salary as Supt. Com.
Schools, ending June 6th 1870

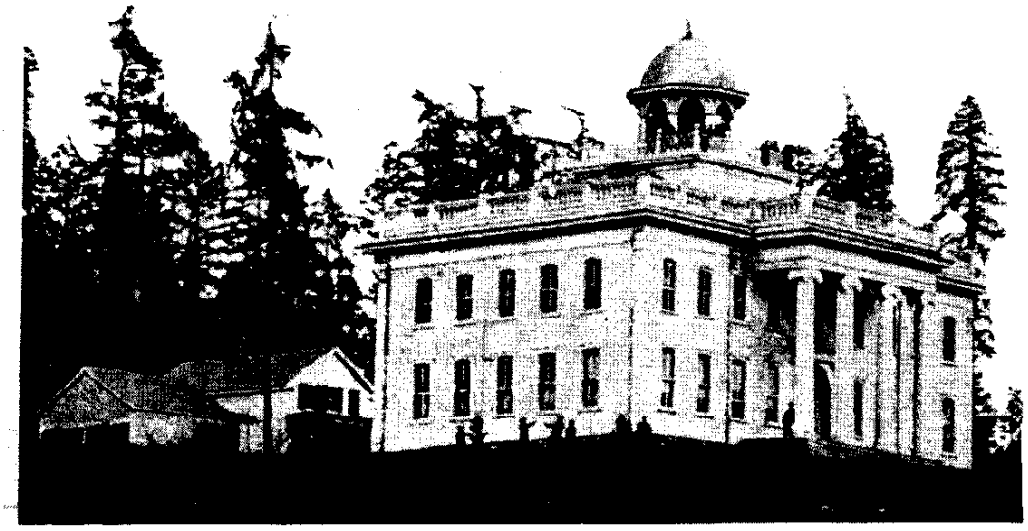
Coms. King Co.

Gentlemen—

I have never
asked for this office nor worked
for an election to it—
I have served the seven
years past, to the best of my
ability, because the people
chose me—
My salary some years has
amounted to but few dollars in
coin— The County numbers
twelve school districts—
Now gentlemen please look
at the example of other counties,
consult the laws, and allow
me what will satisfy an honorable
mans conscience—

Yours truly
E. Carr

KING COUNTY SUPERINTENDENT OF COMMON SCHOOLS
Illustrating Meagre Pay During Pioneer Period



TERRITORIAL UNIVERSITY

Three years later that law was repealed and the university located on the Cowlitz Farm Prairie in Lewis County; but due to the efforts of A. A. Denny, legislative member from King County, in January 1861 the university was finally established here. Land bounded by Seneca and University Streets and Third and Sixth Avenues, a dense forest then on the outskirts of town, was donated by A. A. Denny, Edward Lander and C. C. Terry. Two months later the clearing of the site was begun, and a road opened up from Columbia Street to the University location to facilitate building operations. At that time Seattle was a village of twenty families with a total population of about 125 whites, and for such a small community the project certainly was an ambitious one. Though Olympia, Steilacoom and Vancouver were larger towns, from this time forward Seattle soon outstripped them, the increase being due to the permanent settlement of mechanics and their families who came to work on the project. School was opened November 4, 1861, and it speaks volumes for the spirit of the hardy pioneers who in eight months depending mostly on their own efforts, caused a forest to be cleared and a building to be erected. Considered too far out of town when established, by about 1890 the university was thought to be too far downtown, retarding the growth of the city in that direction. The Chamber of Commerce began to advocate its removal to one of several tracts then available, and on March 7th, 1891 the legislature passed an act providing for the establishment, location, maintenance and support of the University of Washington. The choice of sites narrowed down so that by 1894 removal was made to its present location.

By legislative enactment of January 10, 1860 the Seattle Library Association was incorporated, its roster consisting of nearly all the original pioneers. Mrs. H. L. Yesler was chosen librarian, and by 1873 the Seattle Library and Reading Rooms were located at First Avenue (Pioneer Square). Two years later Mrs. David S. Maynard opened a free reading room in her home on First Avenue South. In the beginning all assistance and services were voluntary, but in 1891 when the Seattle Public Library was officially organized a salaried superintendent was employed. Its location was in various rented quarters, the last being the Yesler residence, where the County City Building now stands, which was burned in 1901. As a result of this fire, Andrew Carnegie gave Seattle $200.000.00 with which funds a new structure on Fourth Avenue was erected in 1906. The first branch library was Fremont, since when many have been opened in all sections of the city.

These cultural facilities as well as the industrial urge, played their part in bringing to Seattle an increasingly greater number of arrivals. They found that land could be had only from the original pioneers, who had staked out their claims

in pursuance to Congressional legislation in 1850 granting settlers between December 1, 1851 and December 1, 1853, 160 acres each to man and wife. Under this act the first donation claims were filed in 1852 by C. D. Boren, A. A. Denny, W. N. Bell, and D. T. Denny. After surveys were made the latter's claim was the first paper ever to be recorded in King County, in 1853, and the first title to be perfected, in 1860. As newcomers arrived, these donation claims were divided into lots, and among the most aggressive realtors of the day was Dr. Maynard. Even before the plat of his claim was filed, he pushed the sale of lots and by his efforts established settlers and their businesses upon his claim, which as long as he lived was the main portion of town. Dr. Maynard did not record these sales until much later; hence the first recorded deed was from C. D. Boren to William A. Strickler on July 12, 1853, representing a sale of property for $1,000.00.

Although the town was growing, until 1853 all mail was directed to Olympia, from which point it was transported to Seattle by canoe at the rate of 25 cents per letter. The increase in activities caused the establishment of a postoffice in Seattle, with A. A. Denny as first postmaster, the first direct mail being recieved on August 27, 1853. The second postoffice was established at Alki in 1854 with C. C. Terry as postmaster until he moved to Seattle in 1855.

King County's orderly progress was at this time interrupted by the outbreak of the Indian Wars. Though most of the tribes were friendly when the American pioneers arrived, having had contact with the white man through the Hudson's Bay Company and the earlier explorers, the attitude of the Indians soon became hostile. In 1853, on the shores of Lake Union, the first murder of a white settler took place. The Indian murderer was tried, found guilty, and executed. From then on murders increased until the troubles in the Puget Sound area culminated in the White River massacre, October 21, 1855, and the gathering of many tribes for an attack on Seattle. The Americans took refuge in the blockhouses at Cherry Street and First Avenue and at Main Street and Occidental Avenue from which women and children were transferred to the sloop-of-war Decatur. The Indians took cover in the woods along what is now Fourth, Fifth, and Sixth Avenues, but the newly organized militia with the help of the "Decatur" and the United States troops repulsed the attack. During these troubles, Lieutenant Slaughter of the United States Army was killed by the Indians, presumably led by Kitsap. At the site of this struggle there subsequently grew up a town named Slaughter in his honor, and one of the counties created out of King was similarly named. Later they were called Auburn and Kitsap respectively, so that no place remains to honor the memory of this brave soldier.

The Indian War slowed down activities to such an extent that by 1857 only 100 people remained in Seattle, with four stores, two industries, and one hotel to serve them. After this conflict so much had been lost that the settlers had practically to begin all over again. What helped was the Fraser River gold excitement in 1858 which established Seattle as an outfitting and starting point, and was responsible for the subsequent growth of the town. During the next ten year period the mining boom continued, due to discoveries at Boise, Idaho in 1864 and next year in the Coeur d'Alene Mountains. By 1860 when the Bagleys arrived in a buggy drawn by two horses, after a fifteen day trip from Salem (being the first to utilize a wheeled vehicle for the journey), the unbroken forest began at Columbia Street, and Seattle's population had increased to 182. Aside from Yesler's sawmill and Woodin's tannery, there were three general merchandising stores, a tinsmith, a blacksmith, two hotels, a restaurant, a photographer, a hospital, a druggist, a tailor and a livery stable. This was fair progress for the lean three-year period after the Indian troubles and it demonstrates the indomitable spirit of the early Seattleites. One of them, Harvey Pike took up a claim which included the portage between Lakes Washington and Union. Realizing the benefits that would ensue from connecting the two lakes, he proceeded to dig a canal using a pick, shovel and wheelbarrow. Naturally his efforts were doomed to failure, but it goes to show the pioneer will to conquer obstacles. It was this same revival of faith in the town's destiny, aided by the gold rush and the increased industrial demands that caused an influx of new

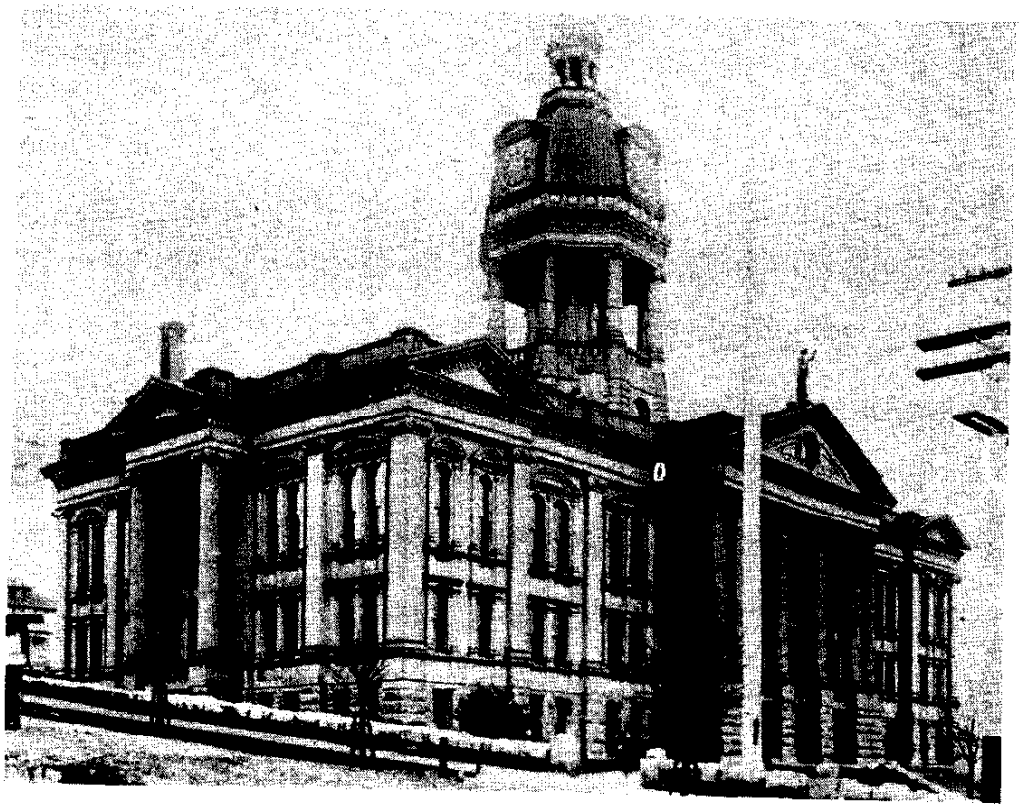
blood. Differing from the first settlers who were farmers and their families, the later arrivals consisted of unmarried miners, loggers millmen, sailors, etc. This created such a scarcity of marriageable white women that Asa Mercer undertook to go East and induce respectable women to come back with him. He succeeded and the marriages that resulted helped to raise Seattle's moral and social standards. By 1883 Seattle and King County were definitely in the lead throughout the state, not only in respect to population, but as to wealth, taxable property, industries, etc., passing ahead of Thurston and Walla Walla Counties.

The growth of Seattle gave rise to an increase in the official business of King County. As early as 1853 the pioneers must have visualized such great progress, for on April 4th of that year the Board of County Commissioners ordered its clerk to obtain title from Dr. D. S. Maynard to Block 17 of the Town of Seattle for the use of King County. Though the transaction was never completed it indicates clearly how the early authorities looked ahead. However, by 1860 plans for an edifice to accommodate county offices materialized in the construction of the first building to be erected for county purposes. It was located at Mill and Third Streets, now recognizable as the triangular plot bounded by Jefferson Street, Third Avenue and Yesler Way. It was called the County Building and here county business was conducted. Leased from H. L. Yesler, then chairman of the county board who owned the land and who had supervised the construction, he took it over for rent due, and it was for a time occupied as a schoolhouse. The county then for several years rented quarters here and there for the transaction of their business. On November 13th 1873, an act was passed providing for the building of a court house and jail in King County, but it was not until 1882 that the first actual County Court House was built. This was a two-story frame building erected at Third Avenue and Jefferson Street (now Dilling Park) at a cost of $3,250.00, and sold to the City of Seattle in 1891 on completion of the next County Court House. Bonds for its construction were issued to the extent of $202 125.00 and a stone building was erected in the block bounded by Seventh and Eighth Avenues, Terrace and Alder Streets, known as "Profanity Hill." Though out of the way, the site was selected because the property was county owned. In 1916, this stone structure was abandoned for the present Court House, bonds for which were issued in the amount of approximately $806,-973.00. Ten years later an addition was built for $1.565,000.00.

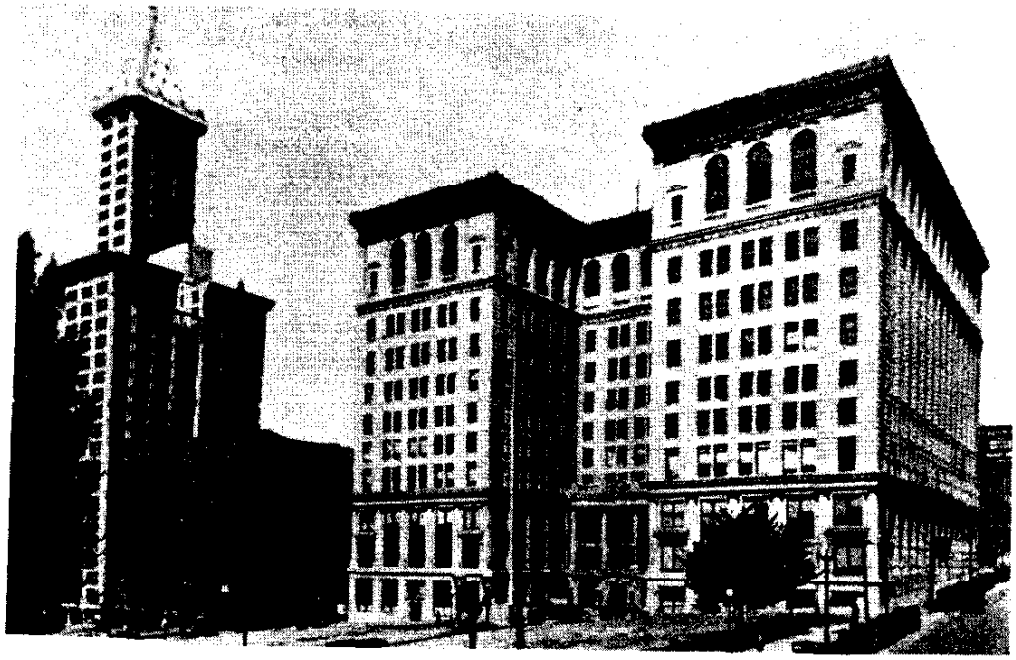
Bond issues were not unknown to King County, one of the earliest being in connection with the Snoqualmie Pass Road. However, county "scrip" or what are today known as warrants, were the first form of financing utilized by the authorities. Many old vouchers were discovered in the files showing both the scrip and the gold dollar value of the invoices, the scrip being at a great discount. The county's financial condition seemed always to be stringent, and on one occasion to ease the strain, when H. L. Yesler was appointed supervisor of the Seattle road district in 1858, all road supervisors and the county treasurer were ordered to accept county scrip at par. In 1877 King County had a $16,000.00 debt on which it was paying 18 per cent annual interest, with its scrip at a discount (nothing very unusual) and were it not for the growing population and a resultant increase in the assessment roll, the county would have been bankrupt. Today's financial condition is, on the whole, very sound the only major difficulty being the relief situation.

In 1893, the King County Hospital was built on a quarter-section in the Duwamish Valley which had reverted to King County when the former owner, John Thompson, died in 1865 leaving no heirs. It is now known as the County Farm, Harborview Hospital having since been completed for the county's use.

Under authority of the Port District Act, Laws of 1911, the King County Port Commission was created by vote of the people, as a separate municipal corporation superimposed on Seattle and King County, but independent of both. Under its direction, the East Waterway was improved and works built at Salmon Bay, Smith's Cove, and the Lake Washington Ferry. Terminals were also constructed at Piers 40 and 41, at East Marginal Way and Spokane Street, at Hanford, Stacy and Bell Streets, and at Salmon Bay.



KING COUNTY COURT HOUSE ON "PROFANITY HILL"



PRESENT KING COUNTY COURT HOUSE

KING COUNTY INDUSTRIES

To complete the picture showing the development and progress of King County (including Seattle) it seems essential to review the growth of its industries, because without them the great strides which this region has made would not have been possible.

LUMBER

The industrial advance in the county began with lumber. In fact the original settlement at Alki and the subsequent removal to Seattle were actuated by the search for piling for the San Francisco market. But even with an abundant forest the newly created community would have been doomed to failure were it not for the establishment of Yesler's sawmill (the first steam-operated plant) on the site of the present Pioneer Square. For ten years it was the principal source of income for the pioneers, most of whom worked in the mill, and the immediate contribution to the development of the community was the replacement of log cabins by houses of milled lumber. Built in 1852, Yesler operated this plant up to the time of the fire in 1889, excepting for a few years when he leased it to others.

Many followed Yesler's lead, and by 1854 there were a great number of mills within the original boundaries of King County, the most notable being located at Seabeck, Port Gamble, Appleton Cove, Port Madison, Port Orchard, Alki and Seattle. When King County lost territory to Kitsap in 1857, all but the last two plants went with it.

Aside from Alki, there were no establishments in the county until in 1854 H. N. Tobin located a mill on the Black River, at what is now Renton, but the difficulties encountered in marketing the lumber due to lack of roads, caused it to fall into disuse. Then came Capt. John R. Williamson, formerly part owner of the Seabeck mill, who on Duwamish Head built a sawmill, wharves, shipyard store, dwellings, etc., calling the place Freeport, (later known as Milton and West Seattle) which continued in operation until burned in 1867. In 1874 A. W. Hite operated a mill at Springbrook, north of Orillia.

Seattle, however, continued to attract lumber plants. Among them in 1875 came George W. Stetson, and in 1881 J. M. Colman and Card & Lair. That year so many new establishments were set up that the waterfront became too crowded and other locations had to be found. The first move out of town was made by the Lake Union Lumber & Manufacturing Company in 1882 to the southern shores of that lake, and their plant was in continuous operation until recently, though under various ownerships. The fire of 1889 wiped out all of Seattle mills, after which many of them located at Salmon Bay in Ballard.

Gradually some plants began to leave salt water altogether, due mainly to the disappearance of the nearby forest, and moved on into the county towards the Cascade Mountains. Some of them are the Snoqualmie Falls Lumber Company, the White River Lumber Company at Enumclaw, and others at Colby, Renton, Hobart, Skykomish, Alpine, High Point, Preston, Selleck, etc. As logging operations continued to advance, the farmer followed, cleared the land, and thus were farming communities developed. Lumbering however, still remains the prime industry in the state, with mills scattered throughout King County, some of them still located in Seattle.

The first record of a wood-working establishment was the sash and blind plant of Lord & Hall on First Avenue South, in 1872. Another in the same year was the sash and door factory of R. Goodman. Later the firm of Stetson & Post went into the same line as did Card & Lair, and in fact from then on nearly all the sawmills engaged in manufacturing the finished product as well. Though produced in the county since 1874 at A. W. Hite's mill, the first shingle factory in Seattle was organized in 1882 by Burnett & Powers.

Among other products made from lumber are barrels, first manufactured by R. C. Graves in 1868, and boxes, which were fabricated soon after. Today so many articles are fashioned from wood in this county, that it would be almost impossible to name them all.

FISHERIES

Though Capt. Robert C. Fay at Alki was the very first in King County to ship salmon, Dr. David S. Maynard became the first to do the same in Seattle. Coming from Olympia to the mouth of the Duwamish River with Chief Seattle, they found salmon aplenty. Here Dr. Maynard prepared and sold many barrels of oil and salted fish to San Francisco, on which two products the fishing industry on the Sound depended for the next twenty-five years until canning methods were introduced. By 1877 Jackson Myers & Company established the first cannery on the Sound at Mukilteo, where the Puget Sound Packing Company already had a salting plant. Three years later the former organization moved to West Seattle when the heavy snows crushed their buildings at Mukilteo. Destroyed by fire in 1888 and rebuilt, it was again burned in 1891, and four years afterwards, as the Myers Packing Company, it was established at the foot of Dearborn Street. Though the enterprise was successful, Seattle's location so far up the Sound from the fishing grounds prevented her leadership in the salmon canning industry; nevertheless the headquarters of many canning firms were established here, as also fishing machinery and supply houses. Among the early inventions that helped the progress of the industry was the butchering machine perfected in 1903 by Edmund A. Smith of Seattle .

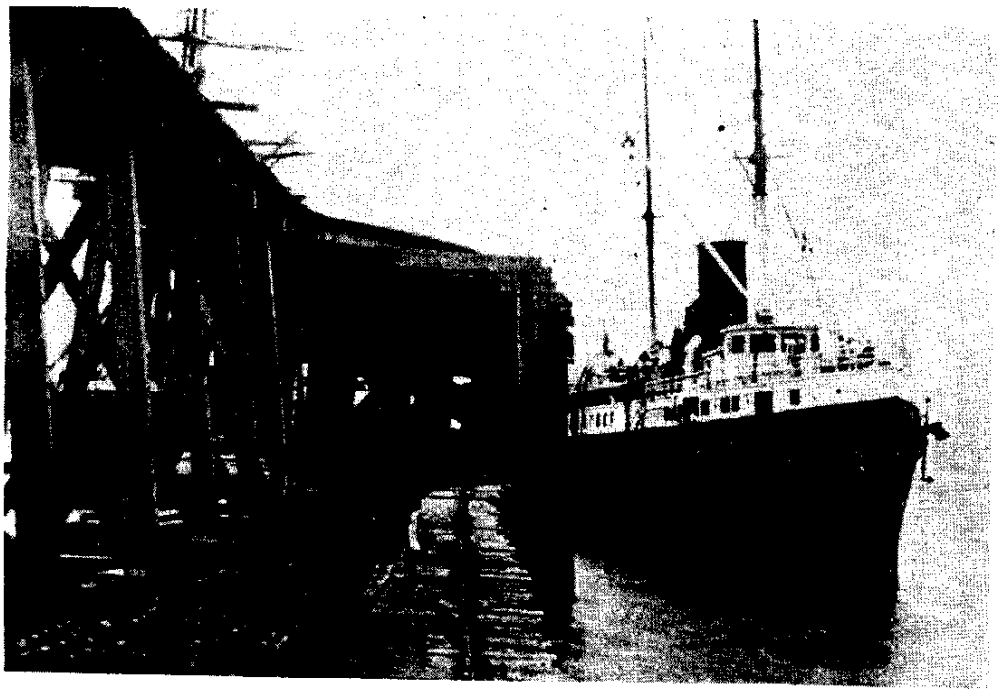
In addition to salmon Seattle does business in halibut, herring, smelts, clams, crabs, and other seafoods, handling large quantities either fresh or frozen through the many cold storage packing houses located here.

COAL

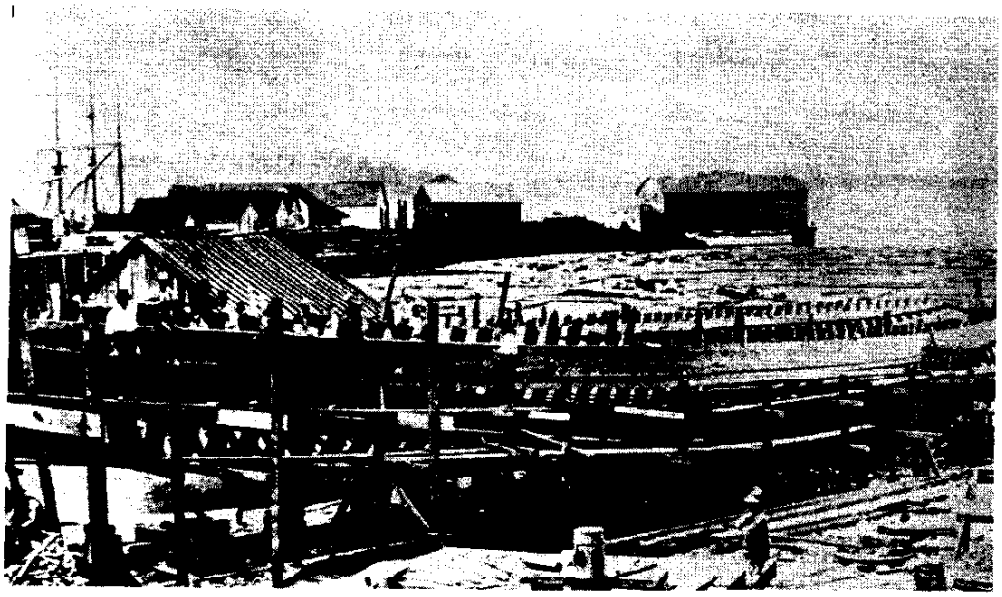
First found in the state on the Cowlitz River by the Hudson's Bay Company in 1833, it was not until twenty years later that coal was discovered in King County by Dr. R. M. Bigelow on his donation claim on the Black River near what is now Renton. He worked the mine in a small way and made some shipments to San Francisco until the Indian War of 1855-6 put an end to operations.

Though discoveries followed elsewhere in the county, and while a certain amount of business developed for local use and for shipment to California, the difficulties in getting the coal out were tremendous. As an example, from the mine to the Seattle waterfront, one company had to handle the coal eleven times. For about twenty years real progress was retarded, mainly because of the lack of transportation facilities. Though roads were built from mines to the nearest body of water it was the long haul to Seattle that held back intensive development. So that when the Northern Pacific Railway decided on Tacoma as its western terminus, it forced the people of Seattle to build its own line to the east, incidentally tapping the mining regions. In 1873 construction of the Seattle and Walla Walla Railroad began, by 1876 reaching the Talbot Mine, next year the Renton Coal Company, and the year following Newcastle and the Coal Creek areas. By the 1880's such progress had been made in providing transportation that a great many wharf and coal bunkers were erected at about King Street to handle shipments.

After the Bigelow discovery in 1853, coal was next located nine years later near Issaquah by L. B. Andrews, who in partnership with William Perkins worked the mine and shipped some coal, but the usual transportation difficulties delayed real operations. H. L. Yesler, Charles C. Terry, Dexter Horton, Thomas Mercer, Dr. D. S. Maynard and others sought to remedy this and were empowered by legislative enactment on January 29, 1864 to incorporate the Seattle and Squak Railroad Company for $600,000.00 to connect with the mines. Nothing was done, however, and it



COAL WHARF AT KING STREET



SHIP BUILDING AT HAMMONDS YARDS, ABOUT 1879
Located at North Side of Yesler's Wharf

was not until 1888 that the Seattle Lake Shore and Eastern Railroad (now the North Bend branch of the Northern Pacific), reached there at which time the Seattle Coal and Iron Company, organized in 1887, began development of the property. Closed in 1904 and reopened six years later as the Superior Coal and Improvement Company. it gave way in 1912 to the Issaquah and Superior Coal Mining Company.

In 1863 Edwin Richardson made a discovery on Coal Creek, causing an influx of prospectors who immediately filed claims, some of them soon grouping to form the Lake Washington Coal Company. Lack of capital prevented any great exploitation and in 1870 the Seattle Coal Company took over, forming at the same time the Seattle Coal and Transportation Company. During the next year they built a railroad from the mines to Lake Washington, another across the portage between Lakes Washington and Union, and a third from the southern end of Lake Union along what is now Westlake Avenue to the foot of Pike Street. Their action was legalized by the issuance of a franchise in 1874 by the city. This would make it the first railroad to be built in Seattle, but not in King County for in 1867 the Coal Creek Road Company constructed a three mile stretch eastward from the mouth of Coal Creek. With the coming of the Seattle and Walla Walla Railroad, the tracks of the Seattle Coal and Transportation Company were abandoned, and eventually the mines and railroads were acquired by the Pacific Coast Company (including the Newcastle mine, opened in 1867).

In 1873 E. M. Smithers located coal at Renton, formed the Renton Coal Company and built a tramway to the Duwamish River, which was abandoned when the Seattle and Walla Walla Railroad came. Next year another vein was discovered at Renton, the Talbot Mine organized to work it, and by 1876 it too had rail transportation. Abandoned in 1886 the Talbot property was reopened nine years later as the Renton Co-operative Coal Company, and in 1901 bought by the Seattle Electric Company.

The Black Diamond mines were worked in 1882 by a California company of that name, originally organized in 1864. Gradually acquiring properties in Washington and Oregon, they discovered veins of excellent coal in the Black Diamond-Franklin-Ravensdale field. Roads were built from mine to river, an extension of the Columbia and Puget Sound Railway (the old Seattle and Walla Walla line) was projected from Renton to the mines, and production began. Three years later Franklin was also opened up by the same company, which, with all its properties and the railroad itself were eventually taken over by the Pacific Coast Company.

Ravensdale was begun in 1900 by the Leary Coal Company, later bought by the Northwest Improvement Company, (a Northern Pacific subsidiary), abandoned in 1915, and acquired in 1926 by the Continental Coal Company. More recently the Dale Coal Company has established at Ravensdale the Dale and McKay mines. Cedar Mountain properties were first worked in 1884 by the company of that name and operated for about twenty years. Coal mines have since been established at Bayne Tiger Mountain, Black River, Palmer, Snoqualmie, Durham, Enumclaw, Cumberland, etc.

MANUFACTURING

The first factory was Yesler's sawmill, the second being Woodin's tannery. It was Maynard's salmon shipments that quickly gave rise to the third manufacturing enterprise which was barrel making or cooperage. In pioneer days these were made by hand, the hoops being of split hazel or small vine maple, until iron ones were introduced in the 1870's. Wooden hoops was a business in itself, many shipments going to San Francisco. Those engaging in this work were indivduals who not only secured the raw materals in the forest but made them into the finished product as well. It was not until 1868 that the first organized cooperage business was established by R. C. Graves on First Avenue.

In 1853 Dr. D. S. Maynard established the first blacksmith shop at First Avenue and Washington Street shortly afterwards giving it over to Lewis V. Wyckoff, a newcomer, who was a blacksmith by trade. In this primitive shop all of Seattle's iron, steel and brass foundries had their foundations. For a number of years only blacksmithing and gunsmithing constituted the metal working trades of the town, and the first foundry worthy of the name was established by John Suffern in 1862. It was in the shop of William Perkins that coal from Issaquah was given its first test in 1863, and the knowledge that this fuel was adapted to iron working and could be had in quantity, led to the establishment of the first real plant of its kind by Thomas Martin in 1865. By 1872 Wilson and Son opened a foundry and machine shop on First Avenue and Spring Street. In rapid succession Terry and Frink opened in 1881, next year becoming the Washington Iron Works; Seattle Iron Works began in 1885, which with the Allmond and Phillips Foundry and Machine Shop (opened in 1887), were consolidated five years later as the Vulcan Iron Works Company. Others engaging in this business were the Dwyer Manufacturing Company which started in Ballard and moved to Seattle as the Variety Iron Works; the Pacific Iron Works establisned in Fremont in 1889; and the Queen City and Seattle Boiler Works which emerged after the fire of 1889 as the Puget Sound Boiler Works.

The second manufactory in Seattle was the tannery of M. D. Woodin and Son at Yesler Way and Third Avenue, established shortly after the close of the Indian War of 1855-6. Selling out to take a claim where Woodinville now is, the business was acquired by John McDonald and later sold to Wold Brothers, who in turn moved to Issaquah to engage in farming. The first large scale tannery to be established was the Seattle Hide and Leather Company in 1886, which next year was called Puget Sound Hide and Leather Company. In 1888 reorganized as D. Kellogg and Company the plant moved to Edgewater (near Fremont), four years later being sold to Hibbard and Norton.

Woodin and Son were also the first boot and shoemakers, though there was not much business in that line because nearly all the early pioneers had their own shoe repair kits. It was in 1870 that H. Jones began to make custom shoes on First Avenue South. The first modern shoe store was established by L. A. Treen, and the first real shoe factory was opened in 1891 by the Washington Shoe Manufacturing Company.

Flour milling dates from 1864 when H. L. Yesler installed the necessary machinery, operating it until 1872 when he leased it to E. F. Lang. In 1893 the Novelty Mill Company established in West Seattle, the Seattle Feed Mill about the same time merging with others into the Charles H. Lilly Company, the Centennial Mill Company in 1898, then the Hammond Milling Company and Albers Brothers in 1908, and in 1912 the Fisher Flouring Mills.

Ice was first shipped in from the Sierra Mountains in 1872 by Capt. Marshall Blinn of Seabeck who built an ice house on Yesler's Wharf. Next came T. E. Jones in the 1880's who cut ice on Lake Union and sold it on the spot. The first ice making plant was built at the foot of Marion Street in 1882 and seven years later another was installed in the village of Yesler, at Union Bay on Lake Washington.

In 1864 Terry and Green opened the first commercial bakery in Seattle calling it the "Eureka," which was purchased by George F. Frye who in turn sold it in 1871 to William Meydenbauer. Terry also established the first cracker factory in 1866. In 1873 A. W. Piper combined baking with candy making. eventually establishing a candy factory on First Avenue, which was burned in 1889.

Soap making in the early days was a matter of each householder storing the ashes of hardwoods, collecting grease and fat and heating the resulting lye and fat combination. In 1870 J. J. Moss first began the manufacture of soap but faced with home competition he had to give it up, as did Isaac Ranck who made the next try in 1873. By 1886 when C. B. Russell and R. M. Hopkins established the Seattle Soap Works at the foot of Seneca Street, the town was ready, and the enterprise was successful.

The first cabinet maker was Henry Van Asselt, who from farming, went to Salem to learn the trade and came back to King County to specialize in tables, beds, desks and cupboards. Though furniture stores were already in existence, Russell and Shorey having begun in 1868, and Hall and Graves in 1874, the stock came from San Francisco. It was in 1875 that the latter firm installed the necessary machinery to make furniture, becoming later Hall and Paulson and doing well until destroyed by fire in 1889 after which it was not rebuilt. Not so discouraged were Rohlfs and Schroeder, cabinetmakers, who after the fire opened up another shop. In 1883 the Lake Union Furniture Company established on that lake and for a time enjoyed good business. Though there were set-backs in Seattle due to the big fire new firms were organized and today the business is of considerable importance.

Pioner brickyards did not represent much capital, so it is not surprising that by 1863 one had already been established by Plummer and Chase. The industry grew slowly, its first great impetus coming from the restrictions as to wooden buildings after the 1889 fire. Gradually other products were added such as firebrick, sewer pipe, drain title, terra cotta, vitrified paving brick and smooth colored building brick. The largest company in this line originated after the fire as the Puget Sound Fire Clay Company, taken over in 1892 by the Denny Clay Company, which adding the mining of coal as well as clay in fields at Kummer and Taylor, became in 1905 the Denny-Renton Clay and Coal Company eventually passing under the control of Gladding McBean and Company.

One of the outstanding business successes was that of Robert Moran. A machinist by trade, finding no work on his arrival he became a steamboat engineer. By 1882 he had opened a small foundry in Yesler's sawmill but was burned out in 1889. Opening again ten days later, the Moran Brothers Company by 1891 had completed a well equipped dry dock and by 1895 were furnishing the United States with equipment designed by Robert Moran. In 1898 they built twelve steamers for the Yukon River service, a torpedo boat for the U. S. Navy and in 1904 the steel battleship "Nebraska." Two years later, dry dock, plant, shops and all were sold to eastern capitalists to become known as the Skinner and Eddy plant.

In clothing, the first inhabitants had more need of repairs than of new garments and the first to provide this service was John Welch who was in business from 1863 to 1887. In 1892 the Seattle Woolen Mill Company was organized at Kirkland, but eventually it shut down. George Black began the manufacture of work clothes in 1902, which by 1915 grew into the large plant today owned by the Black Manufacturing Company.

Early shipyards were small affairs, with no machinery—nothing but carpenters tools. Furthermore, early shipbuilders too often sailed away as masters of the boats they built. So that although there were many engaged in the trade on a small scale and the Seattle waterfront from Yesler's Wharf to Smith Cove contained more shipyards than any other industry, there was nothing of a permanent nature in the business. The first of the steady shipbuilders was George Austin who in 1861 at the foot of Marion Street began turning out skiffs and ships' boats. In 1869 Elias Hoskins opened a shipyard and in the same year William Hammond followed suit with a location north of Yesler's Wharf, where he made coal barges, two years later building stern-wheelers and schooners. T. W. Lake yards were established at Belltown in 1873. Yards were also built at West Seattle and many ships launched from there.

Among other pioneers in industry in the various lines were: Hugh McAleer who was the first tinsmith and made the city's pots, pans and other utensils; Vitus Schmid who began to build wagons in 1871; William Pigott who organized the Seattle Steel Company (afterwards the Pacific Coast Steel Company), the first to manufacture steel in 1904, and who founded during the next year the Seattle Car Manufacturing Company (now the Pacific Car & Foundry Co.) and the Pacific Coast Forge Company.

KELLOGG'S DRUGSTORE ABOUT 1868

INTELLIGENCER BUILDING ON JAMES STREET 1870

Other industries that helped Seattle's commercial growth are brooms, wood creosoting, wood pipes, cordage, wire rope and many more especially in recent years.

NEWSPAPERS

King County's first newspaper was the *"Seattle Gazette"* published December 10, 1863 by J. R. Watson in the Gem Saloon Building on First Avenue South near Yesler Way. Seattle lagged far behind other communities in this respect, for in 1852 Olympia and Steilacoom had newspapers, Whatcom in 1858 and Port Townsend in 1860. By 1867 S. L. Maxwell, a new arrival, bought the plant of the *"Gazette"* from the Bagleys who then possessed it and began publication of the *"Intelligencer"* as a weekly, which was a success. Seven years later David Higgins of Victoria bought it, selling out in turn to Thaddeus Hanford who was followed by Thomas W. Prosch and Samuel Crawford. In June, 1876 the *"Daily Intelligencer"* was started, and two years later the *"Post"* began publication, the two being merged in 1881 into the *"Post-Intelligencer,"* which with various changes in ownership is still being published.

For many years after 1881, newspapers were established, some to prosper others to fail. Among them were the *"Chronicle," "Herald," "Bulletin," "Mirror,"* and *"Sun."* About 1887 some of them were merged by Col. George G. Lyon and Thomas H. Dempsey to become the *"Times,"* and others by Homer M. Hill to be known as the *"Press."* In 1889 W. E. Bailey of Philadelphia bought the latter, and two years later the former, consolidating them as the *"Press-Times."* By 1896, after Bailey failed, Col. Alden J. Blethen purchased the paper, which in time became known as the *"Daily Times,"* and it is still being published by the Blethen family.

The third of Seattle's daily newspapers is the *"Star,"* founded in 1899 by E. N. Wells and Company, one of the partners being E. W. Scripps of the Scripps Publishing Company, who a short time later organized the Star Publishing Company which is still in existence.

The *"Argus,"* Seattle's oldest weekly newspaper, first issued on February 17, 1894 under A. T. Ambrose and O. N. Furbush, was bought out by H. A. Chadwick by 1900.

The *"Daily Bulletin"* originally devoted to court and official county news was acquired in 1900 by J. P. Fuller, who soon afterwards incorporated the Puget Sound Publishing Company. In 1903 the *"Daily Times"* took them both over and continued publication until 1916, when purchased by O. J. David and M. F. Brown operating the Record Publishing Company and the *"Daily Record,"* a sheet featuring building and commercial news. The new publishers combined the two as the *"Seattle Daily Bulletin"* which was changed in 1919 to the *"Seattle Daily Journal of Commerce."*

As settlements grew throughout the county, local newspapers were established and some of the towns enjoying such publications are Auburn, Bellevue, Bothell, Enumclaw, Issaquah, Kent, Kirkland, Renton, etc. In Seattle itself the development of the community paper kept pace with the growth of the city, and some districts which are excellently served in this respect are Ballard, Rainier Valley, University, West Seattle, etc. Besides there are a number of religious publications, and foreign language papers.

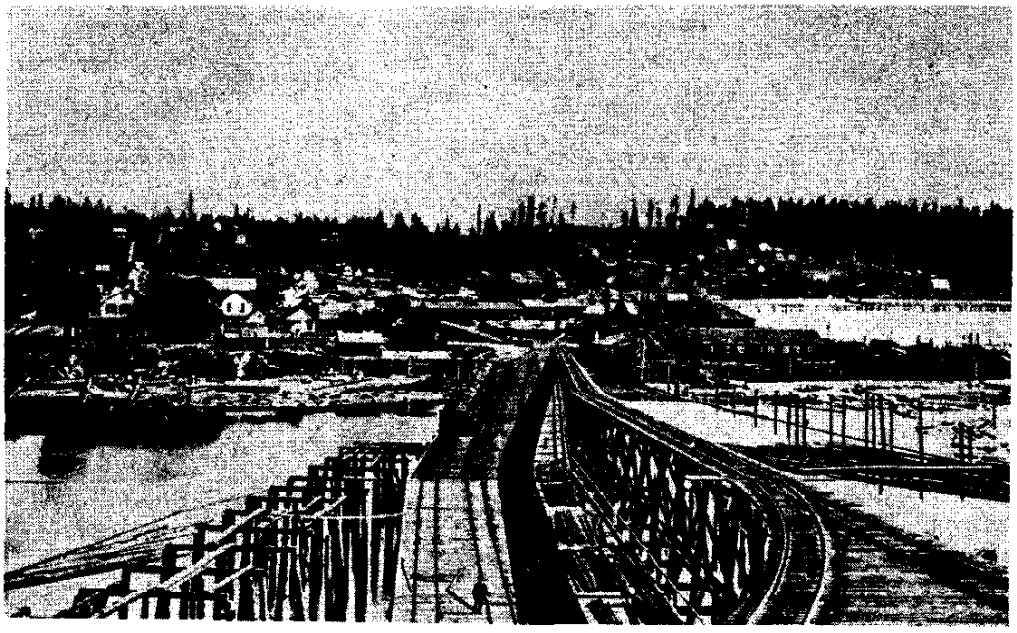
RAILROADS

Almost from the beginning the early pioneers had their thoughts fixed on a railroad from the east with terminus on Elliott Bay; for only two years after Seattle was founded, Congress had provided for a reconnaissance survey of four transcontinental lines. Isaac I. Stevens, Washington's first governor ,and the first to complete his study, reported on his arrival from the east that he favored a northern route with terminus on Puget Sound, but the Civil War stopped all futher consideration.

As early as January 1857 the legislature passed an act to incorporate the North ern Pacific Railway Company, the trustees being among others, A. A. Denny and Edward Lander, to begin at the eastern boundary of Washington Territory in the

Rocky Mountains and to come direct to Puget Sound, with a branch down the Columbia River to Vancouver, thence to the terminus on the Sound. But, on July 2, 1864 the Northern Pacific Railroad Company was chartered by Congress, given grants of land and authorized to construct a main line along the Columbia River to Puget Sound with a branch across the Cascades to the same terminus. A charter amendment in 1870 designated the main line along the Columbia River with a branch to Puget Sound. That was Seattle's first disappointment for they had expected a branch over Snoqualmie Pass which would have made their community the natural western terminus of the railroad. When construction actually began every settlement on the Sound had aspirations, mainly Olympia, Steilacoom, Tacoma, Mukilteo and Seattle, which at that time had the largest population, 1,142, with Tacoma about 200. Company directors surveyed each community which made a bid, eliminating them all but Seattle, Tacoma and Mukilteo, then returned east for the final decision, which was rendered in 1873 in favor of Tacoma.

This spurred the citizens of Seattle to action. Donations and subscriptions were offered and the Seattle and Walla Walla Railroad and Transportation Company was organized in 1873 to connect with the east. Construction lagged due to lack of capital but during the next year the people themselves set to work and graded three miles of road from what is now South Seattle. By 1875 the Renton and Talbot mines were reached, and soon thereafter Newcastle. Six years later Henry Villard, an eastern capitalist, gained control of the Northern Pacific, became its president, and in 1882 bought the Seattle and Walla Walla line naming it the Columbia and Puget Sound Railroad Company, which next year was extended to Black Diamond and Franklin. He also bought the old coal railroad originally built by the Seattle Coal and Transportation Company. Feeling friendly towards Seattle he built feeder lines to connect that community with the Northern Pacific; but when forced to retire from the presidency in 1884 the railroad company abandoned these connections until compelled to resume their operation. Thus Seattle for the first time had rail connection with the outside world, though the Northern Pacific still did everything possible to discriminate in favor of Tacoma.



COLUMBIA & PUGET SOUND RAILROAD TERMINAL
King Street and Occidental Avenue, About 1883

Not satisfied with the turn of events, a plan was conceived to build a railroad around the northern end of Lake Washington to Sumas and a connection with the Canadian Pacific Railways. Therefore, in 1885, utilizing their own resources, Seattle citizens organized the Seattle Lake Shore and Eastern Railroad Company, within three years completing the first division to the coal fields at Issaquah. To raise money for construction to Spokane and Sumas, the Seattle and Eastern Construction Company was formed with New York capital, completing the forty miles to Spokane. Startled by this success the Northern Pacific purchased control of this railroad and in 1886 began construction across the Cascade Mountains.

However, Seattle did not need or care about them any more, because the Great Northern Railroad Company was busy throwing its lines over the same mountain range, coming through to this city in 1893, at first over Stevens Pass which was completed in 1892. Eight years later a tunnel was built shortening the grade and distance, and in 1928 further such savings were made by the construction of their new Cascade Tunnel.

By 1909 the Chicago Milwaukee and St. Paul Railway reached Seattle through the Snoqualmie Tunnel, leasing as part of their lines the Columbia and Puget Sound Railroad (the old Seattle and Walla Walla) from the owners, the Pacific Coast Company. Other lines to come in soon thereafter were the Union Pacific and the Oregon-Washington Railroad, both in 1910.

PUBLIC UTILITIES

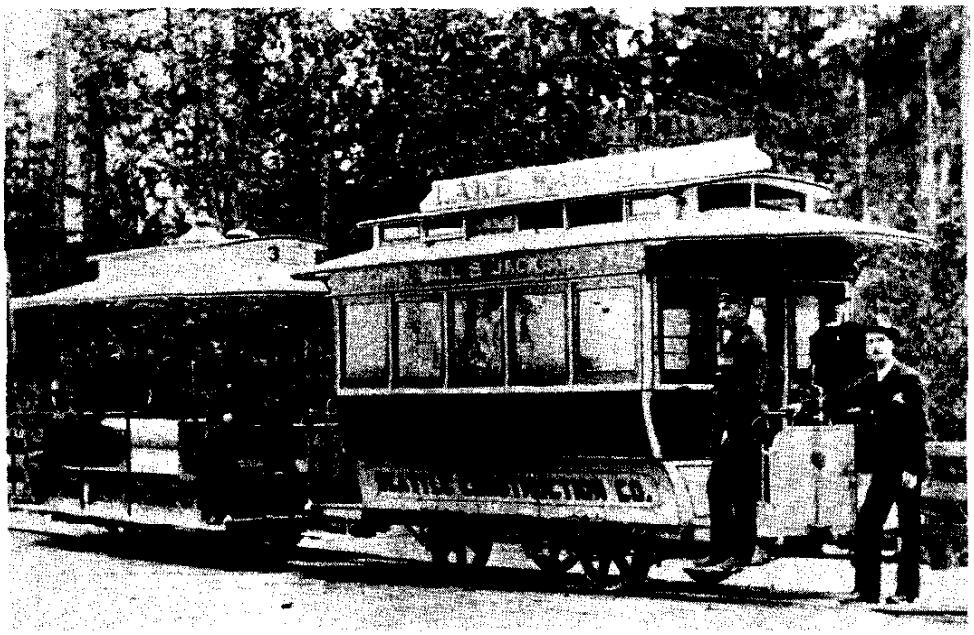
A review of these services displays the individual initiative which built up these industries but also demonstrates the trend towards public ownership of the utilities. Some of them are already operated by the municipal authorities.

Mails. This was the first public utility in King County. Up to the time a post office was established at the "town situated on Puget Sound" (as it was called before receiving the name Seattle), all mail came from Olympia by weekly canoe express, for which service 25 cents per letter was paid to Robert W. Moxley. Until the completion of the Union and Central Pacific Railroads in 1869 communication was by way of the Isthmus to San Francisco to Portland to Seattle. The first direct mail service from the East to Puget Sound came with the completion of the Northern Pacific Railroad in 1873.

Telegraph. The legislature on January 27, 1863 granted Joseph Cushman the right to construct an electro-telegraph line to connect with Portland, Oregon, continuing from Vancouver, Washington through Olympia and the Puget Sound to New Westminster, B. C. and Victoria on Vancouver Island. Thus it was that on October 26th, 1864 the Western Union Telegraph line reached Seattle. Very soon the Postal Telegraph Company came and Seattle is now served not only by telegraph but by radio communication with the outside world, the original Marconi Telegraph Cable Co. having received a franchise from the King County authorities.

Telephone. F. H. Lamb, the superintendent of the telegraph line in Oregon and Washington, conducted the first successful demonstration of the telephone in 1876, between Seattle and Freeport (West Seattle). Though in 1881 the first telephone franchise was given to John M. Kollock, it was three years later that the first telephone exchange was established by the newly-organized Sunset Company. In 1900 the Independent Telephone Company was in the field, and thirteen years later they were acquired by the Sunset Company, merged as the Pacific Telephone and Telegraph Company.

Since 1900 King County has granted about thirty franchises, eight having been taken over by the Pacific Telephone and Telegraph Company. Four were assigned to the West Coast Telephone Company, serving Tolt, Duvall and Richmond Beach. The Lake Washington Telephone and Telegraph Company, Kirkland, acquired three. The Fall City Telephone Company serves Fall City, Redmond, Tolt, Preston, High Point, with other independent companies tapping Vashon Island, North Bend, Kent-Auburn, until today nearly all parts of King County have telephone service.



FIRST CABLE CAR IN SEATTLE—1888

TRACKLESS TROLLEY IN SEATTLE—1939

Gas and Electricity. The first gas franchise was granted to a group of Seattle capitalists, among them Daniel Bagley, Henry A. Atkins, George F. Whitworth and Henry L. Yesler, who on August 11, 1869 incorporated with a capital stock of $50,000.00. Nothing was done about it, so that on June 6, 1873 the city council gave a franchise to Dexter Horton, A. A. Denny and others to use the streets for the dissemination of gas to be manufactured by the Seattle Gas Light Company, incorporated by H. L. Yesler and associates. By the end of that year, gas was already lighting Seattle's streets. Up to 1883 this group made extensive improvements, but electricity was in the offing, which their franchise did not cover, so that the Seattle Gas Light & Electric Company was formed, receiving an electric light franchise in 1886, under which they supplied their gas subscribers with current obtained from another company. In 1892 the company reorganized and on expiration of the exclusive feature of their franchise, it was incorporated in 1898 as the Seattle Gas & Electric Company. Three years later the city council granted a fifty year gas franchise to H. R. Malone of Denver who sold it to the Citizens Light and Power Company, an eastern group. After a battle for supremacy, Chicago bankers by the names of Charles G. and Rufus C. Dawes, consolidated the two companies in 1904 into the Seattle Lighting Company. Since named the Seattle Gas Company, it has extended its mains to the county at various points, having since 1905 been granted four of the seven franchises issued by King County. One has been given to the Washington Gas and Electric Company of Tacoma, which serves a small area adjacent to Pierce County. The remaining franchises are inoperative.

The first franchise for the transmission of electricity was granted in 1881 to a company formed by Bailey Gatzert, George Rowe and George W. Harris, but it remained dormant until the Seattle Electric Light Company was organized in 1885. A plant for the production of electricity was built next year on Jackson Street between First and Occidental Avenues, which was wiped out in the fire of 1889, but rebuilt. In 1890 on being granted a franchise, Dr. E. C. Kilbourne formed the Pacific Electric Company, later incorporating it as the Home Electric Company. By 1892 the existing Consumers and the Home electric companies were united as the Union Electric Company until acquired in 1899 by Stone and Webster interests, who also gained control of most of the independents (others having gone out of business). They called their organization the Puget Sound Power and Light Company, which became known as the Puget Sound Power Company in 1903. Reorganized in 1912 as the Puget Sound Traction Light and Power Company, it reverted to the original name when the street railway system was sold to Seattle in 1919.

Two years after entering the electric lighting field, (in 1902) Seattle's City Light was ready to supply power, and their competition forced rates downwards giving King County cheap electricity. In 1912 they built a dam across the Cedar River, in the same year installing a unit on Lake Union followed by a steam plant there in 1914. Transmission lines were extended to Tacoma in 1923. Demands for power exceeded production and by 1924 the first unit of the Skagit project, originally conceived about 1917, was completed, and construction of the Diablo Dam began in 1927. The operation of City Light has been successful from the start, in spite of the low rates it fostered (or perhaps because of them), and their lines have been reaching out into many sections of the county.

Since the turn of the century, King County has issued about sixty franchises, of which number thirty-five went to or were subsequently acquired by the Puget Sound Power and Light Company. Seattle City Light has been granted nine, the Mutual Power and Light Association of Tanner two, and the City of Tacoma one. Of the balance, a few have been given to independent companies, while the rest have either expired or remain inoperative.

Street Cars. The first franchise for horse-cars was granted to David T. Denny and George Kinnear, who in 1883 passed it on to Frank H. Osgood who had recently arrived. A line was established (the first street car system in all Washington) from Yesler Way and Second Avenue to Pike Street, where on account of the Denny

Hill blocking progress to the north, two lines branched off, one west to First Avenue to Battery Street and the other east by various streets to Lake Union. As early as 1886 Osgood recognized the importance of electricity as the motive power for this new form of transportation, and when in 1888 the West Street, Lake Union and Park Transit Company was organized by others he proposed consolidation with his company and it was effected under the name of the Seattle Electric Railway and Power Company. Power equipment and rolling stock were brought from the east, the machinery being installed at the foot of Pike Street, and by 1889 the first electric car was run over the system, the horse cars being abandoned immediately. Next year extensions were built to Fremont and Green Lake. Also in 1890 the West Street and North End Railway Company began to operate a line from Columbia and Post Streets along the waterfront to Smith Cove to Ballard. The year following the Union Trunk Line built a system including a cable on James Street from First Avenue to Broadway, and an electric north and south on Broadway to Beacon Hill, with a branch to Rainier Heights on Lake Washington. In 1892 a line was inaugurated from James Street and Broadway, eastward to Lake Washington, and Fred E. Sander projected one to South Seattle to connect with an existing Georgetown line. Eventually all electric companies except the one to Renton and the cable cars, were acquired by Stone and Webster interests.

The first cable line was the Lake Washington Cable Railway Company organized in 1888 by Fred E. Sanders and associates, routed from Yesler Way and Occidental Avenue, through Yesler Way to Lake Washington and return through Jackson Street. This company was absorbed by the Seattle City Railway Company in 1890. Other cable lines soon established were the Front Street and North Seattle Cable Railway Companies (to the top of Queen Anne Hill) which in 1889 were consolidated with the First Avenue Cable Railway Company. In the same year the South Seattle Cable Railway Company was organized to run south from Jackson Street on First Avenue South, and the Madison Street Cable Railway was incorporated to go from the foot of Madison Street to Twenty-fifth Avenue, two years later being extended to Lake Washington.

Interurban lines running from Seattle had their inception with the Rainier Avenue Electric Railway Company, from James Street east to Rainier Avenue thence south to Rainier Valley. Going into receivership in 1890 it was sold in 1905 to F. H. Osgood, who continued the line to Renton. After undergoing many vicissitudes it was abandoned in 1936 and replaced by City of Seattle busses. To the north Fred E. Sander, who incorporated the Everett and Interurban Railway Company in 1902, began a road from Ballard to Everett, covering a distance of fifteen miles to Hall's Lake by 1905. Reincorporated in 1907 as the Seattle-Everett and Interurban Railway, it was sold to Stone and Webster and called the Seattle-Everett Interurban Company, afterwards the Pacific Northwest Traction Company. It too was abandoned in 1939 due to loss of patronage, the day of the interurban being over.

The next step in the street car situation was municipal ownership, when in 1911 the people voted a bond issue of $800,000.00. A line was started in 1912 at Third Avenue and Stewart Street over Dexter Avenue to Ballard. Next year the city accepted as a gift the Highland Park and Lake Burien Railroad line, and in 1918 they bought the Loyal Railway. With these as a nucleus the people voted to buy out the Stone and Webster group for $15,000,000.00 which was done in 1919, but city operation did not seem to be so successful. A reorganization is now in process, utilizing trackless trolleys and busses and with newer equipment, losses may be turned into profits. In the twenty years since 1891 King County has issued twenty-five franchises, most of them to companies which made up the Stone and Webster consolidation.

Water. This public utility which comes under the purview of the County Engineer's Office is treated at length under "Water Districts."

KING COUNTY ROAD SYSTEM

It has been noted that municipal ownership and operation of utilities such as electricity, street cars, water and sewerage have been accomplished in Seattle. In King County this development has lagged due principally to the absence of enabling legislation. The method has been for residents or communities interested to form districts for public utilities, water, sewerage, drainage, etc., so that the extent of the county's operations for the benefit of the public may be said to be confined to flood control, fire patrol, parks and playgrounds, and roads (including bridges and wharves). So important is this last function that in 1939 the legislature recognized the public necessity of coordinating all county administrative programs, especially highways. By their action county commissioners were charged with taking steps to effect such coordination, to prepare annual reports and submit joint recommendations biennially to the Governor and the State Legislature. They were empowered to designate the Washington State Association of County Commissioners as the coordinating agency. Such a program will indeed be of benefit in the administration of the highways, especially in King County, which has the burden of the largest road system.

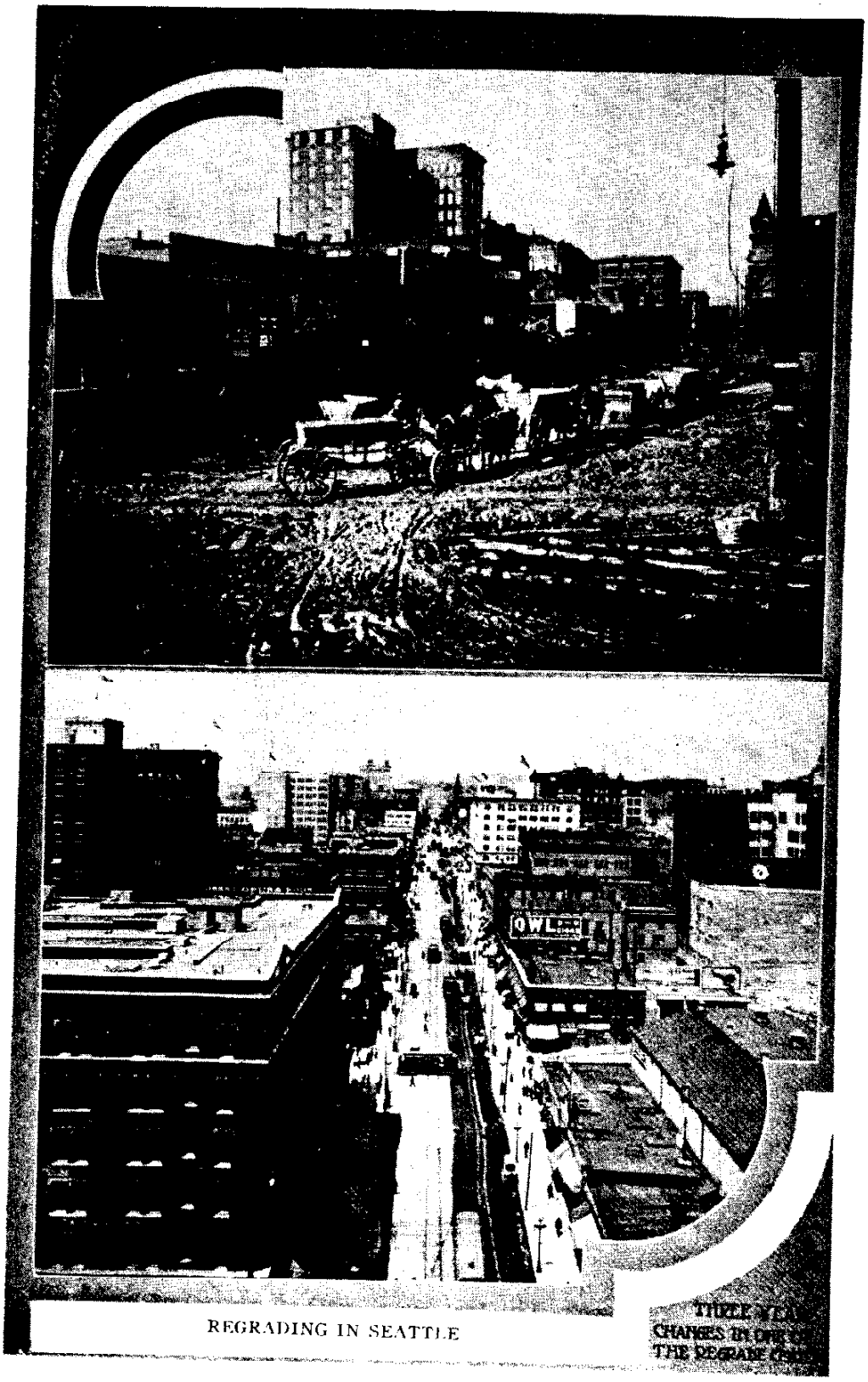
SEATTLE STREETS

King County's roads properly begin with and in Seattle, for that community was already established before the county was created. When the first settlers arrived at Elliott Bay in 1852, there was unbroken forest from the shores to the Cascade Mountains. The site of Seattle was a mass of hills and hollows, with scarcely a level block north of Yesler Way in the central district. For the first few years there were no streets or sidewalks worth mentioning; mere footpaths through the woods, and roads winding between stumps.

When the town was incorporated in 1865 the first street improvement was the laying of sidewalks on both sides of First Avenue South. In 1866 uniform grades were established for the first time on all main streets which up to then had followed many ups and downs. Improvements came slowly however, and until 1870 Third Avenue was impassable for wagons. In May, 1872, the city council fixed the grade for the "datum point" at three feet above the stone monument at the center of Yesler Way and First Avenue South, so as to establish the grade seven feet above spring tides, it being transferred later to the northwest corner of Washington Street and First Avenue South. By 1875 sidewalks had been laid as far east as Eighth Avenue and as far north as Pine Street, and from First Avenue and Pike Street to Belltown.

Next year came the first comprehensive regrading operation, with First Avenue completely improved from James to Pike Streets and the hill at First Avenue and Cherry Street eliminated. Deep gullies in James Street were filled, Second Avenue ditched, and Fifth Avenue cleared to the woods at Virginia Street. In 1879 Yesler Way was planked, followed by similar treatment on all downtown streets during the next fifteen years, and though by 1893 some streets had been gravelled, the first paving was of brick on First Avenue South between Washington Street and Yesler Way, which the Denny Clay Company constructed as an experiment at its own expense. In 1882 Pike, Union, Jackson and other streets were graded. The district east of Fifth Avenue, north of Union Street and out towards Lake Union was a deep ravine, requiring immense fills to bring roadways up to the new grade.

First and Second Avenues ran straight to Yesler Way where there was a jog of about half a block to continue respectively on First and Second Avenue South; but after the fire in 1889 both sections of each street were joined by a curve to eliminate the jogs, leaving triangles known respectively as Pioneer and Fortson Square. Miles of streets were also rebuilt and regraded after the fire, the debris and excavated materials being used to create streets west of First Avenue. Until 1893 Pike Street east of Eighth Avenue was a deep valley with a steep hill towards

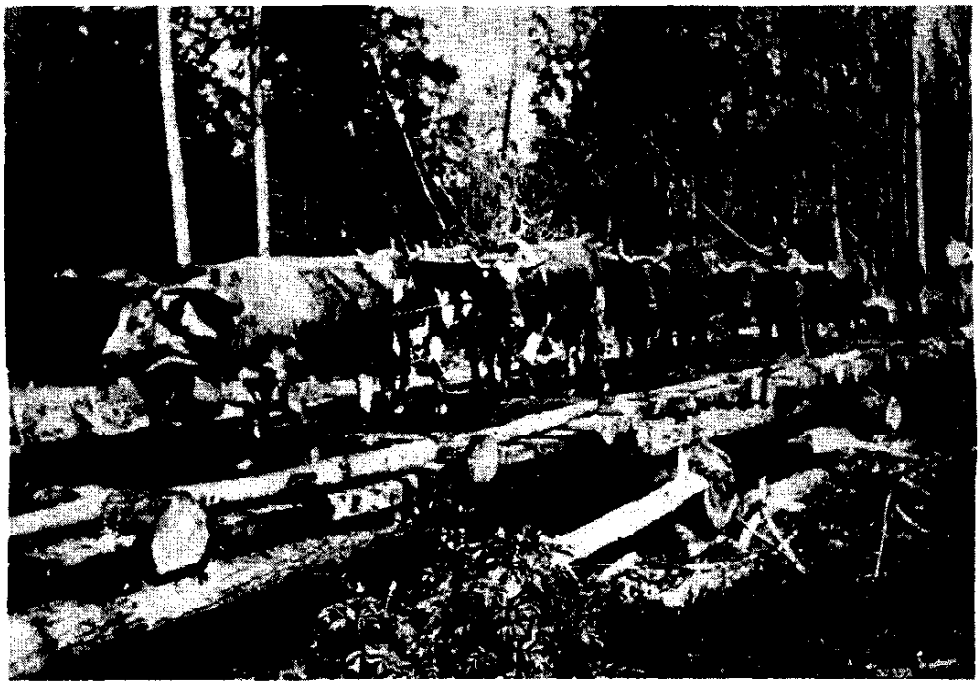


REGRADING IN SEATTLE

Broadway, the filling and grading of which, completed in 1904, gave easy access to the Broadway district. This was followed by a regrade of Pine Street from Second Avenue to Broadway.

Then came the removal of the great Denny Hill which had blocked the development of Seattle to the north, from the very beginning. Though they are generally thought of as the first and second Denny Regrades, there were actually several operations. The first one, levelling First Avenue from Pine Street to Denny Way began in 1898 and was completed by 1903, the earth being used to fill Western and Railroad Avenues. Next was Second Avenue with even deeper cuts as can be imagined when it is realized that Second Avenue and Lenora Street before regrading was 190 feet higher than Pioneer Place, or the height of a twelve-story building. Then followed in 1906 the regrading of Third Avenue from Yesler Way to the north. Two years later Fourth and Fifth Avenues were cut through, which is erroneously called the first Denny Regrade. Lastly, a few years ago the remainder of the hill was levelled between Fifth and Westlake Avenues as far north as Harrison Street, known as the second Denny Regrade. Along about 1906, lower Fourth Avenue and Westlake Avenue from Denny Way to Pike Street were rebuilt.

To the south, between 1907 and 1914 the Jackson Street regrade, establishing easy communication with Rainier Valley, was completed in the area between Main and Judkin Streets and Fourth to Twelfth Avenues. At the same time the Dearborn Street regrade, including the Twelfth Avenue Bridge to Beacon Hill was under construction. With the last Denny Hill operations, Seattle's streets have reached their present status.

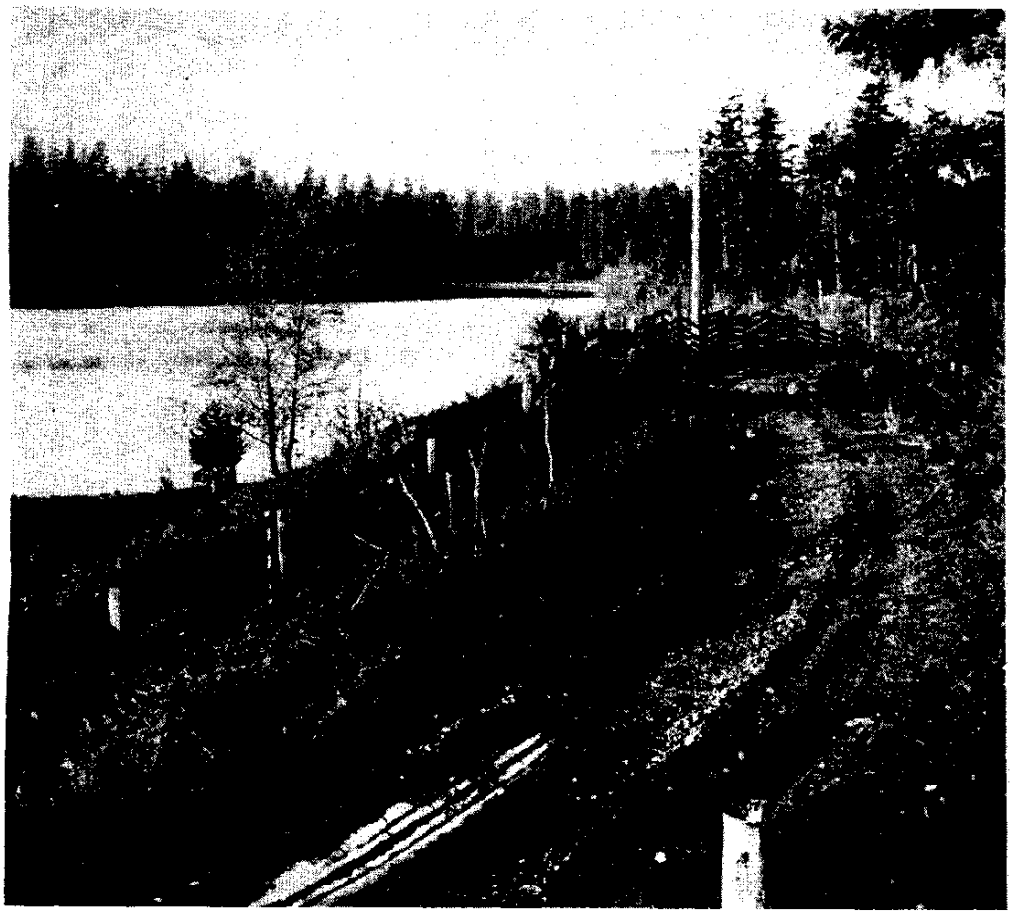


PIONEER PUNCHEON ROAD

COUNTY ROADS TO 1860

Completed in the face of huge obstacles, Seattle's task was no greater than that which confronted the county, where great distances had to be traversed. The first settlers to arrive came by way of Oregon, following the Cowlitz River over the Cowlitz Trail and through the Sound waters to their destination. Although in the broad prairies of Pierce and Thurston Counties roads were easily made and Olympia and Steilacoom both had good highways in every direction, the terrain in King County proved too difficult for the slender resources of the earliest pioneers. For more than twenty years thereafter, the northern counties relied mainly on the Sound and the rivers for communication with each other. The few roads built by the settlers were very crude. Following the contour of the land, hugging the ridges, and with very steep grades, they were often built of the "puncheon" or "corduroy" type, which consisted of slabs of cedar laid like ties across long poles sunk in the mud. Clearing the heavy timber was a problem, and often the trails would wind around any big trees in the way. There were no bridges at first, and travel across rivers at road ends was by canoe or other similar means.

No road in the county itself was under way, other than the few streets in Seattle, until the Board of County Commissioners on July 6th, 1854 accepted the report of Thomas Mercer, Henry Van Asselt and H. H. Tobin, viewers of a road from Seattle to intersect the one from Fort Steilacoom to Fort Walla Walla. Surveyed by William A. Strickler, this would make him the first county surveyor. Though called "Road No. 1" of King County it was in reality a territorial road, being one of three established in 1854 by the legislature.



EARLY VIEW OF MILITARY ROAD, STEILACOOM TO SEATTLE
Passing Through Jovita

The other two were the first in King County, to be known as "The Military Road," one section from Fort Steilacoom to Seattle, and the other to Bellingham Bay. Road commissioners apppointed by legislative enactment for the first mentioned project were Willis Boatman of Pierce and Joseph Foster and W. H. Brannan of King County, replacing viewers W. N. Bell, L. M. Collins and J. M. Chapman appointed by Thurston County which lost jurisdiction when King was created. The report of the original viewers on March 23, 1853 was therefore not acted upon, and the road was constructed on the basis of the inter-county road commissioner's report dated July 19, 1855. In the same year, the territorial legislature memorialized Congress to grant an appropriation, but it was not until July 1859 that the Federal Government let the contract to Philip Keach at $93.00 per mile. The route was surveyed and marked by U. S. Army Engineers but civilians under Keach did the work, and completed it in 1860 as King County Road No. 4. Though the records do not show, that portion between Seattle and Bellingham Bay must have been completed by 1863, for in that year on petition of H. A. Smith of Smith's Cove, County Road No. 12 was established to connect Shilshole Bay with the Whatcom Military Trail. Had not the U. S. Government built these as military roads, the early settlers would have been unable to make much progress.

The first proper King County road was viewed on March 5th, 1855 by John Henning, W. H. Gilliam and Joseph Foster. Petitioned for by the Grows, the Fosters, Van Asselt, Holgate, etc., and established as Road No. 2, it connected with the territorial road from Steilacoom to Seattle at Henry Van Asselt's claim, thence up the Duwamish River to a crossing at the claims of B. L. Johns and C. C. Lewis, thence up the south side of the river to the claims of John Thomas and Joseph Foster. It reached Seattle by way of Beacon Hill, and on its route are the present communities of Thomas and Foster.

Though viewed earlier than Road No. 2, by Edmund Carr, J. H. Nagle and C. D. Boren, on February 28, 1855, the road to Thomas Mercer's claim and thence to Ross and Strickler's Mill on Lake Union was established as Road No. 3. Among the signers of the petition was D. S. Maynard who appended to his signature the phrase "with no expense to the county."

As a matter of fact, these early roads were built by the pioneers themselves, and with very little cost to the county. Not always petitioned for, nor established, they were just built. For years right of way was no problem, because for the most part these roads, (in the beginning merely glorified trails) were carved out of the trackless wilderness. An example may be cited in the case of Thomas Mercer, who brought to Seattle the first team and wagon. In order to utilize his equipment, the neighbors undertook on their own initiative to improve the existing trail to Lake Union (undoubtedly Road No. 3 mentioned above), by making it a wagon road, running along First Avenue to about Virginia Street, thence diagonally over the hill (now gone) to Sixth Avenue North and Battery Street, and thence north through the D. T. Denny claim to Mercer's on Lake Union.

In 1855 these were all declared by the Commissioners to be lawfully opened as county roads. Thus began King County's present extensive system of highways. Their development was interrupted by the destructive Indian Wars, which so disrupted the orderly process of county government that on March 3, 1856 the Board declared all road matters suspended for the duration of the conflict. In the meantime, most of the roads had become practically impassable, and active efforts to improve them were not under way until the early 1860's.

SNOQUALMIE PASS ROAD

At about this time, in 1859 to be exact, the first work was done by Seattle citizens on a project that they envisoned from the very first. The earliest pioneers came here by way of Oregon, without wagons or stock, and for several years all immigration to this area was through that territory. Later immigrants from the East were farmers and while they heard about and desired to come to the Puget

Seattle July 3rd, 1854

The undersigned having been appointed by the Legislature of W. T. to view & locate a road from Seattle to intersect the road from Steilacome to Fort Walla Walla; Would beg [illegible] that they have discharged the duties assigned them, & find the said road to be of public utility and the ground over which it passes generally very favorable.

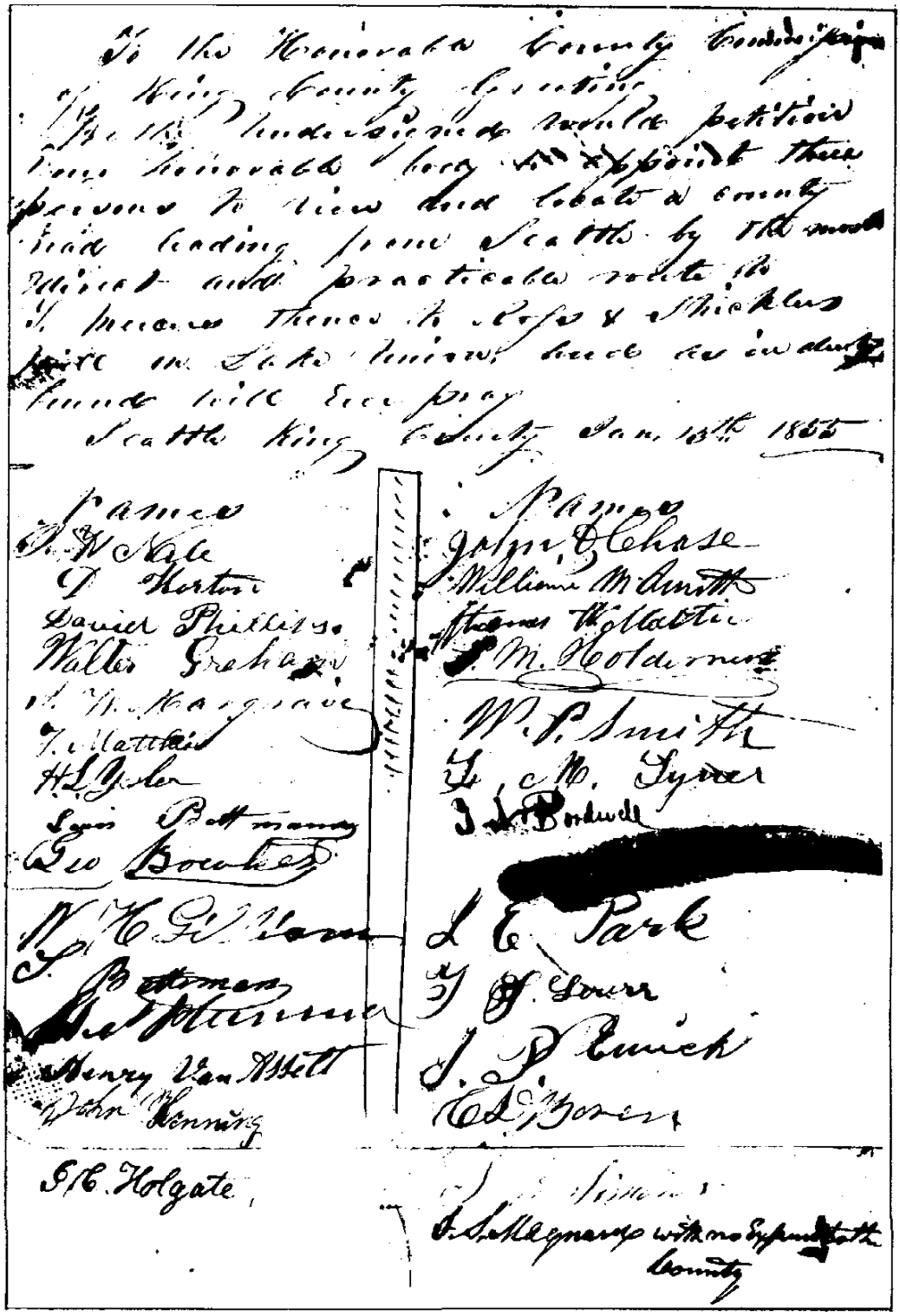
For further particulars we would respectfully refer your honorable body to the accompanying plat and field notes by W. A. Strickler Engr. Surveyor. You will also find in the accompanying bill a correct account of the expense incurred in locating said road all of which is respectfully [illegible]

To
The Honorable Co. Com. Court of King Co. W. T.

Thomas Mercer
Henry Van Asselt
H. H. Tobin

This Report to be Recorded
ROAD NO. 1
Recorded in Road Book
Page 9.
Filed June 30/1854 [illegible]
Recorded July 21st/54
[illegible]
1854

VIEWERS' REPORT ON KING COUNTY ROAD No. 1



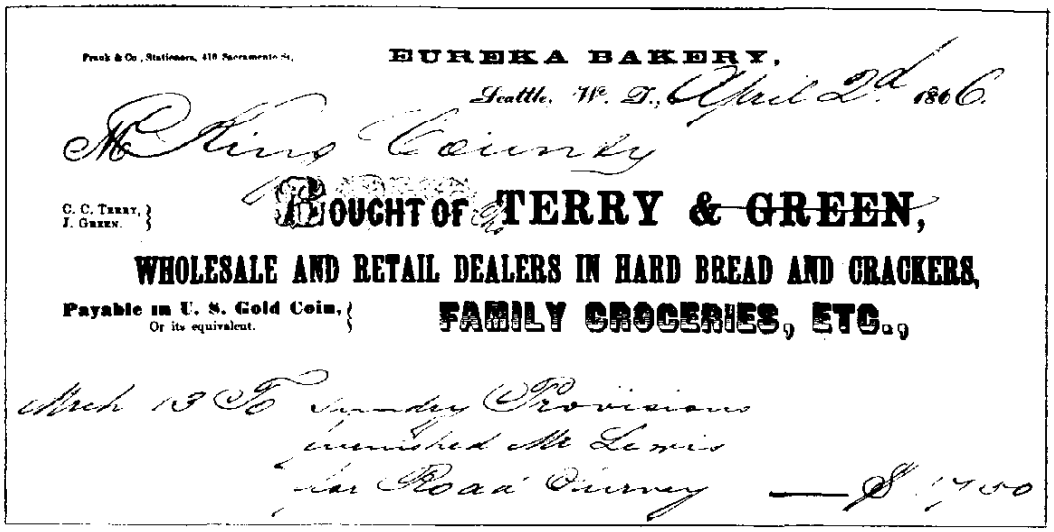
ROAD PETITION TO ROSS AND STRICKLER'S MILL ON LAKE UNION
Note Signature of D. S. Maynard "with no Expense to the County"

Sound area they were prevented from doing so for lack of roads over which to bring their equipment. Since there was no direct route from the East over the Cascades, settlement in King County would have been seriously affected unless efforts were directed to open a road through the pass nearest to the budding village of Seattle.

Long before the whites came to King County, Pierce and Thurston residents sought a wagon road from Steilacoom to Walla Walla by way of Naches Pass. By 1850, thirty miles were completed to Porter's Prairie near the present town of Enumclaw. Memorialized by the Oregon Legislature, Congress appropriated money in 1853 to go ahead with the work, but due to federal delay the settlers raised $6,000.00 and finished the project the same year, sufficient to enable new arrivals to get through.

While its completion gave impetus to the direct settlement of Pierce and Thurston Counties, it did not greatly benefit the Seattle area; therefore its people hastened to construct a connection with the Steilacoom-Walla Walla Road (established as King County Road No. 1). They felt, however, that a route over the Cascades to Seattle was still essential, and they favored Snoqualmie Pass known since 1848 to be available and accessible, being a thousand feet lower than any other. Territorial Governor Stevens, in 1854 ordered it surveyed and the next year another group including Judge Lander, Dexter Horton, C. D. Boren and Charles Plummer also explored the route, finding it favorable. Further consideration was delayed, due to the Indian conflict, and in 1859 Seattle residents headed by Yesler, Maynard and Denny raised $1,350.00 with which they constructed a stretch from Rangers Prairie, a short distance above Snoqualmie Falls, to North Bend. Calling attention to these initial efforts, the territorial legislature memorialized Congress for an appropriation, a bill for which was introduced during the 1860-1861 Session with no action thereon due to the Civil War. In 1865, a further $2,500.00 was raised by the same committee to work on the road as surveyed by E. Richardson, R. H. Lewis and Jerry Borst. Contract was awarded to William Perkins and by the end of the year twenty-five miles was completed from Snoqualmie Prairie to near the summit. In 1866 the legislature appointed Levi Farnsworth to explore both Snoqualmie and Naches Passes, and the Board of County Commissioners hastened to appropriate $2,000.00 in case his report was favorable to the former; but Farnsworth chose Nachez Pass. Not discouraged, further agitation resulted in the legislature appropriating $2,000.00 to be matched by King and Yakima Counties. King raised the money through the efforts of Yesler, D. T. Denny, Terry and others, for the construction of these units: (1) Cedar River and Squak Prairie to Squak Creek; (2) Squak Creek to Snoqualmie Prairie; (3) Snoqualmie Pass to Yakima Valley. Contract was awarded to Daniel Brackett at $120.00 per mile, and A. A. Denny and C. Clymer were appointed to locate and superintend the project. Abandoned by Brackett, the contract had to be re-let to Henry B. Manchester at $130.00 per mile and by the end of the year a passable highway was built. In 1868, the legislature appropriated a further $2,500.00 which was expended under the direction of Jerry Borst.

Keeping the highway open was a problem. Rains washed away bridges, trees fell across the road and at times it became impassable. The Snoqualmie Pass Road Fund was about depleted by 1870, and the road bonds hitherto issued to cover amounts raised by the committee were in default. At this juncture, the legislature in 1871 authorized the King County Commissioners to borrow not exceeding $12,000.00 at a maximum of 1½ per cent monthly interest to redeem these bonds. This covered previous expenditures but it still left the county without funds to maintain the road. By 1875 the situation was so critical that the legislature passed an act permitting the disposal of any individual's property by lottery, 10 per cent of the proceeds going to the county, the money to be used for a road thirty feet wide from Snoqualmie Prairie in King County to Lake Keechelus in Yakima County, to be built as a portion of the territorial road from Seattle to Walla Walla. An inter-county commission representing King and Yakima was appointed to locate the road, advertise for bids and let the contract, but the plan failed of achievement, the lottery scheme having been declared illegal.



Frank & Co., Stationers, 410 Sacramento St.

EUREKA BAKERY,

Seattle, W. T., April 2d 1866.

King County

C. C. TERRY, J. GREEN.

BOUGHT OF TERRY & GREEN,

WHOLESALE AND RETAIL DEALERS IN HARD BREAD AND CRACKERS,

Payable in U. S. Gold Coin. Or its equivalent.

FAMILY GROCERIES, ETC.,

March 19 To Sundry Provisions furnished Mr Lewis for Road Survey — $ 17.00

AN EARLY PROVISION BILL FOR SNOQUALMIE PASS SURVEY
Viewers were Edwin Richardson, J. W. Borst and R. H. Lewis.

EARLY VIEW OF SNOQUALMIE PASS ROAD
Through Dense Forest West of Pass

Discouragement and disappointment followed, and as in 1869 when the Puget Sound Wagon Road Company was organized to build a toll road (though nothing came of it), so in 1883 the Seattle and Walla Walla Trail and Wagon Road Company was launched for the same purpose. They improved the road so that it was passable for cattle, but still difficult for wagons, maintained it and collected tolls for about ten years, when, allowing it to fall into disrepair, they sold their rights to King County for $2,250.00 before an action for annulment of franchise could be brought to trial.

With the completion of the Northern Pacific Railway line across the Cascades, the Snoqualmie Pass Road became a matter of minor importance until the advent of the automobile, when in 1909 King and Kittitas Counties provided funds to open it to a width sufficient to permit cars to pass. By 1915 a new route was surveyed for increased auto traffic, money appropriated and the road completed over the summit. In 1929 grades were reduced, the roadbed widened, and miles of new concrete highway constructed at a cost of more than $2,500,000.00, representing the Snoqualmie Pass Road of today, and the fulfillment of the earliest dreams of the Seattle pioneers.

COUNTY ROADS—1860-1870

By 1860, when the Bagleys arrived, in addition to those above mentioned, the only other roads in use were a short one from south of the present Jefferson Park to the Wetmore Farm in Rainier Valley; another to the Nagle farm at Denny Way; one over Denny Hill to the Mercer and Denny farms near the present Civic Auditorium; and a rough trail over Queen Anne Hill. All these and many others established before the incorporation of Seattle were, of course, county roads. Once they came under the jurisdiction of the city, so many of them were relocated to conform with the city's subsequent plan, that their original identity has been lost, though at least two of them can still be traced as former county roads.

One, established in 1860 as D. B. Ware Road No. 6, (later known as the McGilvra Road) is that which ran to the McGilvra place on Lake Washington along what is now Madison Street. D. B. Ware was the first signer of the petition and John J. McGilvra the third. The petition itself is a veritable blue book of early Seattle, containing the names of nearly all the pioneers, such as Dexter Horton, D. T. Denny, Thomas and Asa Mercer, Daniel Bagley, Ira Woodin, Hilary Butler, etc.

Another is that which for twenty years was known as the "Beach Road." It was petitioned for by D. S. Maynard to run from the foot of Main Street in Seattle along the beach to meet the Alki Road (also petitioned for by Maynard, and established in 1860 as Road No. 5). There was very much discussion as to the route, the road was viewed and reviewed, and finally established in 1863 as Road No. 14. Its construction caused some damage to George Holt's place and he was awarded $220.00, which constitutes the first recorded damages in connection with road building in King County. Relocation was undertaken as County Road No. 57, and with shore lands since filled, city streets have for a long time taken the place of this "Beach Road."

With the Indian troubles at an end, and settlers going back to their farms, it was realized that connecting roads were an essential factor in the progress of the county. Numerous petitions were presented by the early pioneers containing many a name that has made history in King County. Space does not permit a detailed mention of all of these petitions, but the years up to about 1870 saw roads branching out in every direction, though today most of them are located within the limits of Seattle:

Road No. 7, petitioned for by David Maurer connected the Squak Prairie with the territorial road a mile west of Black River.

Road No. 8, petitioned for by Thomas S. Russell to connect territorial roads between the White and Black Rivers.

Road No. 12, petitioned for by Dr. Henry A. Smith for a road at Shilshole Bay through Carr's claim to connect with the Whatcom Military Trail.

Road No. 13, petitioned for by Christian Clymer, to connect the Seattle-Black River Road with the Duwamish River Road.

Road No. 16, petitioned for by R. W. Pontius, to begin at Union and Third Streets, running northerly to the Pontius claim and thence to Lake Union.

Road No. 19, petitioned for by J. W. Maple to connect the Seattle-Martins Ferry Road on the Duwamish with the Seattle-Steilacoom Territorial Road.

Road No. 20, petitioned for by C. C. Lewis, to connect his and L. J. Holgate's claims with the Black River Bridge near Smithers and Clymers.

Road No. 25, petitioned for by William Goldmyer from Pontius Road northeasterly through the portage between Lake Union and Union Bay, thence to Lake Washington and up the lake to Sand Point.

COUNTY ROADS—1870-1910

By 1871 among the roads running out of Seattle were these: The Beach Road along the foot of Beacon Hill to Duwamish by which eastbound and southbound travel left town; Yesler's Road to Lake Washington at Leschi Park; McGilvra Road along Madison Street to the McGilvra place on Lake Washington, near the present Madison Park. In November of that year a road was cut through the timber from the McGilvra Road at about the second hill, north to Union City at the portage on Union Bay between Lakes Union and Washington, now the Montlake District, with a trail for horsemen proceeding a mile or two further. In 1874 a road was built from Alki Point, through Freeport (West Seattle) south to connect with a county road, for the first time making land transportation possible between Seattle and West Seattle. Two years later came a road from the south end of Lake Union to Salmon Bay, (now the Ballard District) with a branch from Salmon Bay through the forest to Green Lake. In 1878 another connected Salmon Bay with Belltown. The next year a three-foot sidewalk was built from Eighth Avenue and Pike Street, down the county road (now Fairview Avenue North) to Lake Union, which can probably be termed the first sidewalk ever built in the county. Judged by modern standards, none of these roads were conducive to comfortable travel, so that generally speaking, only those who had business to take care of ventured into the county.

Demands for new public highways exceeded the financial means of the county, which caused settlers in outlying districts to provide such accommodations at their own expense. These were not to be confused with private roads which were always constructed by the resident who desired access to a public highway. An example of a highway built without cost to the county is that of the Wold Brothers and Company from Snoqualmie Prairie to Squak Valley. On April 25, 1870 they petitioned the commissioners to accept this as a county road, because it shortened the distance to Black River by three miles, which after the viewers reported favorably, was established as Road No. 29.

The discovery of coal soon gave impetus to building roads and as early as 1863 there was one from the mines at Issaquah to Lake Sammamish. This was followed by the Coal Creek Road, and in the next decade by such connections as Squak Valley to Seattle Coal Mines, Renton to Newcastle, Newcastle to Sammamish River, Lake Washington to Newcastle, and Black River Bridge through Renton and Talbot mines to Langston's Ferry on the White River. In 1884 a road was built to the Black Diamond Coal Mines.

As pioneers pushed forward to the fringe of civilization, roads were projected to their new settlements, and by 1880 connections were made between Seattle and Tolt, Duvall, Fall City, points on the Snoqualmie River, and to the Snohomish County line.

In the next ten years many highways connecting settlements and towns were constructed, as from Juanita Bay to Woodinville, Renton to Newcastle, Green River Road, Porter's Prairie Road, Maple Valley to Squak (Issaquah), Newcastle to Snoqualmie, Squak Lake (Lake Sammamish) to Snoqualmie, Snohomish Junction to Bothell. In 1883 roads on Vashon Island were established. In the 1890's the mining areas in the Miller River and Money Creek districts were made accessible, by way of what is now known as the Stevens Pass Highway.

Up to about 1900 most of the efforts were centered on new construction due to the demands for transportation in every part of the county. While there was always some work to be done in widening trails and relocating and improving existing roads, it seems that by the turn of the century the building of new highways had caught up with the development of the county. Hence, between 1900 and 1910 the records show that most of the contracts awarded were for widening, regrading, graveling and drainage of existing roads.

PAVED HIGHWAYS

The county road system that developed from the earliest days, was evolutionary in its growth, not only as regards the number, but the type of roads which met the needs of the era. At first they were mere trails, then dirt wagon roads built to a width of about eight feet with turnouts at intervals. Where dirt roads were not practical because of poor drainage, they were built of the "puncheon" type or of planks, and even as late as the 1900's there were still some in use in the county. Many dirt roads became impassable in rainy weather and as they received more and more traffic the use of gravel increased until new construction included gravel surfacing as a matter of course.

As increased travel occasioned the growing use of gravel, so did it eventually cause much thought to be given to the problem of hard-surfaced roads. One of the first types was the macadamized construction consisting of small stones laid on a surface of large ones, as developed by John Loudon MacAdam, Scotch Engineer, in the 1800's. In this particular territory, a true macadamized road was one which consisted of a mixture of gravel and clay over rock, which hardened to a smooth surface under the pounding of traffic. The first built of these materials was Road No. 57, which was thus converted about 1894.

The introduction of the automobile during the early years of this century caused authorities to investigate the possibilities of smooth hard-surfaced highways suitable for such vehicular traffic. Though the problem then was not as great as it developed in later years, experiments were undertaken with an asphaltic type of road, made of materials produced under such trade names as Warrenite, Dolloway, Amiesite, etc. These and others were all bituminous mixtures commonly known as blacktop. In 1907 the first road thus treated was James Clarke Road No. 2, known as State Aid Road No. 1, from Riverton to Renton Junction, which was also the first to be improved with the assistance of the state. Except for repairs, the original surface is still in use. The latest development in blacktopping is the three-stage oil stabilization treatment, which is explained in greater detail elsewhere in this report, and which has oil as the main ingredient instead of asphalt.

The increased use of the automobile as a means of transportation stimulatd the search for a more suitable and permanent type of pavement. As far back as 1894 the county had, as an experiment, given the Seattle Brick and Tile Company permission to lay fifty feet of brick paving in South Seattle, at their expense, but it was not until 1912 that King County contracted for the first installation of this type on the West Valley Road between Kent and Auburn. Compared to the development of concrete pavement, not very many brick roads were constructed in the county, because undoubtedly they proved hazardous to automobile traffic, especially when wet. Concrete was then the next type of pavement decided on, and the first such road, probably experimental, was that short stretch called the Crawford and Conover Road, now North 143rd Street between Aurora and Greenwood Avenues, installed in 1914.

As smooth, hard-surfaced, high-speed, concrete highways stretched out into the country and as traffic increased and automobiles covered greater distances in shorter time, city residents moved into the outlying suburbs, resulting in a natural augmentation of new roads or extensions of those in use. As traffic continued to grow in volume on these newer roads more paving took place, and at one time the county boasted of a fairly large mileage of hard-surfaced highways. However, since 1907, which witnessed the passage of legislation organizing the State Highway Department as an administrative unit and initiating the practice of state aid to counties, each legislature has increased the mileage of state primary and secondary highways. Thus, many of the earlier paved county roads have long since come under the jurisdiction of the state. And as the population increased and scattered over wider areas, more and more roads were hard-surfaced by the county, only to be added to the state highway system, until their mileage of paved highways exceeds that left under county control. Today gravelled and newly graded roads comprise most of the highways remaining under county jurisdiction.

DENNY HILL REGRADING

HIGHWAY LEGISLATION

(From 1854 to Date)

Though all road laws since 1854 were repealed with the enactment of the highway code in 1937, the rules and regulations which have governed the state and the counties in the development of their road systems to the present time are here outlined in their various stages. Laws concerning such phases as road establishments, petitions, surveys, right of way, vacations, bridges, wharves, ferries, franchises, plats, flood control, drainage, water districts, etc., are treated under the headings devoted to each, the information which follows referring to road matters of a general or administrative nature. As early as 1857 road laws were considered important enough for the legislature to order them printed in pamphlet form by the territorial printer. From time to time succeeding administrations did the same, the latest publication being the "Basic Highway Laws" of the 1937 session.

STATE HIGHWAY DEPARTMENT

In the beginning there was no special unit within the framework of the territorial government charged with the supervision of inter-county highways. In fact the earliest legislation of April 19th, 1854 shows that though the territory had jurisdiction over such roads, construction and maintenance were at the expense of the counties. Always established by an act of the legislature, which at the same time appointed a board of territorial road commissioners to view and locate them, surveys had to be made within a year at county expense, and as for county roads. The counties also bore the cost of construction, damages (if any), and maintenance, in proportion to the mileage lying within their boundaries, and had to report annually to the territorial secretary as to the condition of the roads and their expenses in connection therewith.

From 1854 to 1905 the procedure remained more or less the same, except for gradual changes in regulations sanctioned by the legislature, such as the provision that roads established were to be viewed and marked but not surveyed unless the act establishing them so provided; that the road commission of three was not only to view and lay out the proposed improvement, but to estimate its cost, let the contract and supervise construction; that counties were not required to participate, the legislature making an appropriation from state general funds on establishment; that counties, on completion, were to maintain that portion of the highway passing through their territory.

These or similar rules remained in force until 1905 when the office of state highway commissioner was created, the governor to appoint every two years. The commissioner, auditor and treasurer were to comprise the state highway board, also established by this act. Although the legislature appropriated funds for the newly created state public highway fund, to be used in the construction of such state roads designated by statute, counties were still called upon to survey and construct them by contract to the successful bidder, subject to the approval of the state highway commissioner and board. Counties were furthermore required to match state funds from their own resources, and after completion, to maintain such roads.

In 1907, state roads, for the first time designated in legislation by number, were ordered constructed entirely by the state from its public highway fund, raised by a property tax which varied with each session. This same act was the first state aid law to be passed providing for assistance to counties, a reversal of the early practice. The contribution from the state public highway fund was to be equalled entirely

from county resources if they initiated the improvement (15 per cent from road district and 35 per cent from road and bridge funds), but if petitioned for, property owners were to bear 15 per cent and the county 35 per cent of the cost. Commissioners' resolution initiating a project necessitated the state highway board's approval, as did surveys, plans, specifications and estimates made by the state highway commission. The board was also authorized to let the contract to the lowest bidder, and on completion the roads were to be maintained by the counties.

The next change in 1911 initiated the permanent highway law for the construction of roads so named, to be paid from a fund established for that purpose and raised by a state property tax which varied each session. In 1915 motor vehicle fees also became part of the permanent highway fund, and beginning in 1917 they were transferred to the permanent highway maintenance fund. There was allotted therein to the counties the amount collected by each from taxes and fees. If the proposed improvement was requested by property owners, they were to contribute the percentage stated in their petition (15 per cent or more). Expenses of the state highway commissioner were to come out of the public highway fund. Commissioners' resolution initiating a project, and the county engineer's survey, plans, specifications and estimate, all were subject to the state highway commissioner's approval. Commissioners were to award construction by contract to the successful bidder, which procedure also required state sanction. Furthermore, for the first time, commissioners were limited as to what they could spend for maintenance from state-inspired funds, the percentage varying from 5 per cent to 50 per cent. The permanent highway fund continued in force until abolished in 1933.

Maintenance of roads constructed under the 1911 act was turned over to the counties, and for this purpose a permanent highway maintenance fund was created in each county in 1917 into which was deposited that percentage of the permanent highway fund set aside by legislation for maintenance, as well as all motor vehicle fees originally deposited in the latter fund. Besides permanent highways, counties were to maintain those called state primary, using both funds.

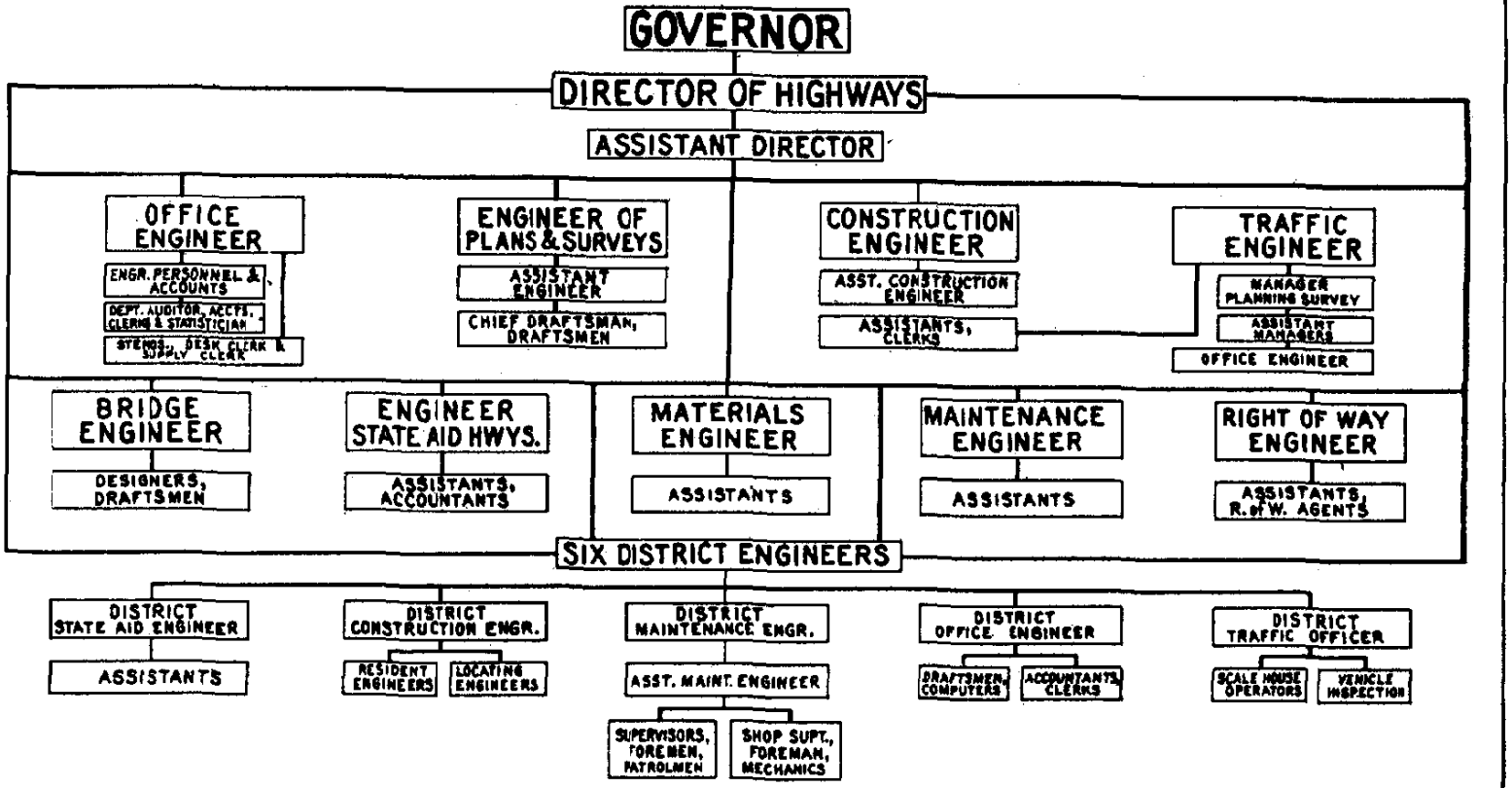
This altered the aspect of the public highway fund, which in 1913 was limited to the exclusive use of the state in constructing their primary and secondary roads as designated by the act, and in maintaining the former; the counties keeping the latter in repair from their own funds. Counties were also given authority to make expenditures from their own resources for construction, maintenance and right of way of all state roads within their boundaries. The public highway fund was abolished in 1923 but two years earlier provision had already been made for the use of the newly created motor vehicle fund for construction and maintenance of state primary, amended to include state secondary highways in 1923.

Up to 1919 it appears that there was no well defined system of highways connecting the principal cities of the state; hence legislation that year provided a bond issue of thirty million dollars to acquire and construct such a network of roads. This, combined with the increase of county improvements built with state aid must have precipitated a further reorganization of state highway administration, for in 1921 a committee consisting of the governor, auditor, and treasurer replaced the state highway board, and to succeed the highway commissioner a supervisor (an experienced road construction engineer) was appointed as assistant director of a newly created division of highways within the department of public works. Two years later these offices were both abolished, the governor appointing a highway engineer to work with the still existing highway committee. This administrative plan continued until 1929 when the department of highways was created to replace the committee, and at its head was installed a highway director to be appointed by the governor with the consent of the senate.

The next state aid legislation was the lateral highway act passed in 1929 calling for a master plan to be prepared by the commissioners, including farm-to-market and state roads, and all others, to be called lateral highways. Payment for construction under this legislation was to be made from the county's allotment of gas tax revenues

ORGANIZATION CHART

DEPARTMENT OF HIGHWAYS OF WASHINGTON



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in the lateral highway fund, only after approval of the county engineer's plans, specifications and estimate by the county commissioners and the state highway engineer. Under the latter's direction, the commissioners were to let the contract for construction by their county engineer. This method continued until the fund was abolished in 1935.

Before another four years had passed, the piling up of so many laws, amendments and repeals had begun to impede the orderly progress of road administration to such an extent that the 1933 legislature directed the governor to prepare a highway code for the 1935 session. In the meantime a step in the direction of simplification was the passage in 1933 of the secondary highway law. Roads were again reclassified, this time as state primary to be designated by specific legislation and to include former state secondary, and county secondary under the supervision of the commissioners and subject to the director of highway's approval. All existing funds set up under the various previous acts were abolished, with the exception of the motor vehicle and lateral highway funds, (both supported by gas tax revenues), which were to be utilized by the state for the construction and maintenance of its primary, and the construction of its secondary highways, and by the counties from their allotment, for the construction and maintenance of their secondary roads, bridges and ferry wharves, and maintenance of state secondary highways. The county's share of gas tax revenues was to be deposited in a newly created secondary highway fund, into which remaining balances of all abolished accounts were to be transferred. From these monies were to be paid all previous county road, independent highway district and so-called Donohue road law bonds. All county resolutions, plans, specifications, estimates, contracts, payments thereon, and all other road matters, were subject to the approval of the director of highways. County commissioners were restricted to not more than 50 per cent for maintenance, of which not more than 5 per cent could be expended for equipment, the balance to be for construction, projects costing more than $10,000.00 to be done by contract.

The highway code presented before the 1935 session of the legislature failing of passage, the director was instructed by that body to submit another for consideration in 1937. Necessitating amendments to the 1933 act, the 1935 session abolished the lateral highway account, the balance therein being transferred to the motor vehicle fund (established as early as 1921), to be utilized by the state for the construction and/or maintenance of its primary roads, including those hitherto known as state secondary. Through the secondary highway fund the counties were to build and maintain their secondary roads including those formerly called township, county, permanent or lateral highways, construction costing more than $5,000.00 to be done by contract.

By 1937 the highway code was passed in four sections, repealing all prior legislation enacted since the beginning:

1. Chapter 53—State Highway Administration
2. Chapter 187—County Road Administration
3. Chapter 188—Motor Vehicle Licenses, Registrations, Operation
4. Chapter 189—Motor Vehicle Operation, Inspection

Chapter 53 gave supervision of state roads to the director of highways, designating primary routes in Chapter 190 and secondary in Chapter 207. Construction, maintenance, roadside development, right-of-way, traffic control, federal aid projects, and franchises were all placed under the same official, the funds therefor to come from the state portion of the motor vehicle fund.

Chapter 187, popularly known as the Washington State Aid Highway Act, placed county road administration under the county commissioners as state agents. A county road engineer was employed, replacing the elected official, to supervise the county road system, to make surveys, plans, specifications, and estimates, and to supervise construction, all subject to the approval of the commissioners and the director of highways. Contracts were to be awarded by the commissioners after receipt of bids, for all projects in excess of $7,500.00. Payments were to be made from a newly established county road fund, into which were to be deposited all monies to the credit of the counties or received by them for road purposes from any source whatsoever. Proper road obligations were described as administration costs; payment of outstanding county road bonds of whatever nature; expenditures of the county road engineer's office; establishment, construction, improvement and maintenance of county roads (no longer called secondary) and securing the right-of-way therefor; bridges, ferry wharves and ferries; construction of sidewalks; maintenance of forest trails; purchase of machinery, equipment, quarries, gravel pits, etc., if in connection with the road system. The manner of keeping accounts was also standardized, four divisions being recognized: Overhead and Operations, Bond and Warrant Retirement, Maintenance, and Construction; the last named to be budgeted at not less than 50 per cent of the amount of money available, percentages of the remaining three to be determined by the commissioners. In 1939 this requirement was eliminated, and the counties were given authority to use funds for construction and/or maintenance at their discretion.

COUNTY COMMISSIONERS

The first highway law passed on April 19, 1854 placed all county roads under the jurisdiction of the commissioners. Up to January 14, 1865, this included all streets in the village of Seattle, which in that year was incorporated as a town and detached from the county road district, their streets being placed under the board of trustees, and collection of road taxes under the town marshal. Repealed in 1867, supervision reverted to the county commissioners until December, 1869, when Seattle was again incorporated, this time as a city, it being once more detached from the county road district and its streets placed under the common council with authority to levy road property and road poll taxes. Not only Seattle but all incorporated cities were released from county supervision of their streets, alleys, etc. As Seattle absorbed surrounding territory, such areas were detached from county road districts in which they were located, necessitating their frequent rearrangement.

However, the communities which remained in the county were continuously under the jurisdiction of the commissioners, but the actual administration devolved on the supervisors who for years performed all duties in connection with road operations. It was only on March 7th, 1890 that the legislature assigned definite powers to the commissioners in connection with the county highway system, which year may be termed the turning point in the history of road administration. From then on the authority of the commissioners increased, while that of the supervisors declined. The duties of the commissioners were: to survey, view, lay out, record, open and construct highways, maintenance remaining with the supervisor; to vacate unnecessary roads; at their discretion, to let by contract all construction and maintenance exceeding $100.00; to levy road property tax; to direct the road district supervisors; to erect and maintain directional and safety signs; to apportion road tax to districts entitled thereto; to audit road district accounts; to remove road district supervisor for inefficiency, neglect or malfeasance in office, and to arrange warrants from county treasurer to road district supervisor to pay for labor not under contract (i. e., county-employed labor).

In all road matters the commissioners acted as a unit for the entire county, which they continued to do up to 1890. Although in 1875 an act was passed dividing King County for the first time into three assessing districts from each of

which one commissioner and one assessor were to be elected, it was on March 26, 1890, that the legislature finally separated each county into three commissioners districts to be numbered 1, 2 and 3, from each of which one county commissioner was to be elected. During the same year it was provided that this official, serving without extra pay, was to be ex-officio road commissioner of the districts within his territory. Since that time the commissioners of the second and third districts have had full charge of the road affairs in their respective areas, though it still requires a majority vote of the board, as always, to make any action legal.

With minor changes and with an occasional reclassification of roads coming under their jurisdiction, the duties of the county commissioners remained the same until the passage of Chapter 187, Laws of 1937, which placed county road administration under them as agents of the State of Washington. Their duties were: to maintain a county engineering office and a record of proceedings pertaining to county roads; to employ a qualified and licensed county road engineer to have supervision and direction of the county road system; to acquire property and structures needed for county road administration; to acquire land for county road purposes; to perform all acts necessary and proper for the administration of county roads.

Another of the duties of county commissioners since the earliest days has been the maintenance, after completion, of roads constructed with state assistance. Beginning with the territorial roads, of which the county had to maintain that portion passing through its boundaries, all state aid roads from the first legislation of March 13, 1907, whether called public, permanent, lateral, secondary, or county highways, were considered as part of the county road system after construction.

COUNTY SURVEYOR

(Later County Engineer)

Though today the county engineer is by law supposed to supervise and direct the county road system, the duties of his earliest predecessor, County Surveyor William A. Strickler, appointed on July 6th, 1854, were merely to survey a territorial road, which had already been located and marked by viewers (non-professional residents). His assistants were two chain bearers and one marker, and his pay was $6.00 for each day's work performed, with his help receiving just half that. All this was provided in the first road law passed on April 19th, 1854.

From that time forward until the surveyor's office was established as a definite function of county government, he led a checkered career. In January, 1855, he became an elected official charged with keeping a record of all surveys, field notes, etc., collecting regulated fees for copies thereof in addition to $5.00 daily, his assistants receiving $3.00. On December 2, 1869, he was again subject to appointment, his work to be done under the direction of the viewers. Two years later he was to be employed by the road district supervisors, his compensation to be fixed by the county commissioners, until in 1879 he was again paid $5.00 per day, his chain carrier and marker being reduced to $2.00.

Up to 1881 the surveyor had nothing to do with viewing a road (equivalent to a reconnaissance survey), his work beginning after the viewers located and marked the route. The 1881 Legislative Code changed it to provide that the surveyor be one of the three viewers, which, excepting for a few lapses, continued to be required until about 1901 when the use of viewers was discontinued.

The same 1881 Code finally determined the status of the county surveyor, providing for his election every two years, until in 1919 an act was passed increasing the term of all county officials to four years effective at the 1922 elections. In spite of this, special legislation sometimes permitted the hiring of an outside surveyor, as in the case of turnpike roads where the viewers had that power, or in instances where the county commissioners deemed the elected surveyor incompetent or inter-

ested in land to be surveyed, or where, as in 1927, the county commissioners were given authority at their discretion to employ an outside engineer to supervise construction in place of the one elected.

In 1881, for the first time, the surveyor was granted the privilege of appointing necessary deputies and his duties in connection with keeping records were re-affirmed. His pay was re-enacted at $5.00 per day plus set fees for furnishing copies of records, which remained in force until 1907 when his salary was fixed at $2,400.00 per annum. His chainbearer (sometimes called chain carrier or chainman), his axemen, flagmen, etc., received pay, as legislated, varying from $2.00 to $3.00 per day until the time came when the county commissioners were authorized to fix the compensatoin of all surveyor's deputies.

By 1885 the surveyor's work had increased to the point where the county allowed him $10.00 monthly for rent, legislation in 1895 requiring his office to be located at the county seat. His functions were gaining in importance for in 1887 he was for the first time required by the county commissioners to furnish a bond in the sum of $1,000.00. By 1895 in addition to chainmen, axemen and other such help which was employed on a per diem basis as needed, the surveyor was allowed a clerk at $50.00 per month, ten years later a draftsman at $75.00 per month and in 1907 a chief deputy at $150.00 per month. These being his only permanent employees on a monthly basis, his budgetary requirements were very modest, and as late as 1902 the expenses for carrying on his office were estimated at only $4,600.00. Naturally, the budget became larger as more permanent employees were added to the staff. By 1913, already organized on a permanent basis for a number of years, the county engineer's personnel consisted of nine in the office and twenty-six in the field, making a total of thirty-five, which four years later had increased to fourteen and thirty respectively, or forty-four in all. Even with the greatly added functions and duties of the office since 1937, and with the responsibility of a much greater mileage of roads, the number of regular and permanent employees has been augmented by only nine at the end of 1939. Nothing in the law required the surveyor or his deputies to be licensed engineers until in 1935 an act was passed regulating the practice of the engineering profession.

Aside from the actual surveying of projected roads, and keeping record of such surveys, field notes, etc., the early officials had little responsibilities. Their importance grew with the years, however, and by 1903 legislation gave them supervision of all construction and maintenance of roads under the direction of the commissioners, who were required to meet with the surveyor and the supervisors once a year to outline proposed road improvements.

In 1907 the title changed to county engineer and to qualify for election the aspirant had to be a competent civil engineer and surveyor. His duties were: to keep a highway plat book; to recommend improvements to the county commissioners; to prepare plans, specifications and estimates; to inspect all bridges annually; and to record and file all papers in connection with each road. All this referred to highways, but with the passage of time many other activities became the function of the county engineer, such as wharves, franchises, court work, flood control, etc.

By 1937 the highway code was passed by the legislature. In an endeavor to more effectively coordinate highway activities between the commissioners, the supervisors and the county engineer, it provided that the last named official be appointed, abolishing it as an elective office effective 1938. Employed by the commissioners, and to be called the County Road Engineer, he was to be a registered and licensed professional civil engineer, experienced in road administration, and was to have the supervision and direction of the county road system, under the direction of the commissioners.

From 1854 to date the following have served the county, some duly elected, some appointed to a definite term, and others delegated to make certain particular surveys, which power the commissioners were given by the legislature regardless of a duly elected county surveyor or engineer in office at the time.

Years Served	*Name*	*Elected or Appointed*
	County Surveyors	
1854	Wm. A. Strickler	Appointed
1855	A. F. Bryant	Elected
1860	Edwin Richardson	Elected
1861	Chas. M. Anderson	Appointed
1863	A. S. Mercer	Appointed
1866-1869	Edwin Richardson	Elected
1870	Clarence L. White	Appointed
1872-1873	Geo. F. Whitworth	Appointed
1873-1875	J. M. Whitworth	Appointed
1875-1877	W. B. Hall	Elected
1877-1879	F. H. Whitworth	Appointed
1879	Albro Gardner	Appointed
1879-1881	John G. Scurry	Elected
1880	F. H. Whitworth	Appointed
1881 1885	F. H. Whitworth	Elected
1881	Chas. M. Anderson	Appointed
1885-1887	Albro Gardner	Elected
1887-1889	Wm. F. Brown	Elected
1889-1891	Chas. M. Anderson	Elected
1891	Albro Gardner*	Elected
1891	Paul Riecker*	Appointed
1891	Richard H. Stretch	Appointed
1891-1892	R. H. Thomson*	Appointed
1892	H. E. Taylor	Appointed
1892-1893	Fred F. Ames	Appointed
1893-1895	Fred F. Ames	Elected
1893-1895	O. F. Wegener	Appointed
1895-1897	Albro Gardner	Elected
1895	W. T. Clark	Appointed
1897-1899	Philo D. Hamlin	Elected
1899-1903	Clarence L. White	Elected
1903-1905	Preston F. Wright	Elected
1905-1907	A. L. Valentine	Elected
	County Engineers	
1907-1909	A. L. Valentine	Elected
1908	R. H. Thomson	Appointed
1909-1913	J. R. Morrison	Elected
1913-1917	Arthur P. Denton	Elected
1917-1921	Samuel J. Humes	Elected
1921-1927	Thomas R. Beeman	Elected
1927-1929	Don H. Evans*	Elected
1929-1931	Thomas D. Hunt	Appointed
1931-1935	Thomas D. Hunt	Elected
1935-1937	Joseph P. Dodd*	Elected
	County Road Engineer	
1937	Harry H. Sisler	Appointed

* Resigned before term of office expired.

ROAD DISTRICT SUPERVISORS

Even before there was a county surveyor there were road district supervisors, and there were road districts in existence even before there was any legislation providing for them.

ROAD DISTRICTS

As early as April 4th, 1853 the commissioners separated the county into two road districts with the Duwamish River as the dividing line: No. 1 to the north under William N. Bell and No. 2 to the south under George Holt. These were the first supervisors appointed in King County. Although the act of April 19th, 1854 authorized the commissioners to divide the county into suitable and convenient road districts, they decided to create but one for the entire county on June 10th, of the same year, with L. M. Collins as Supervisor.

The authority of the commissioners to create, alter or abolish road districts was periodically confirmed by the legislature without specifying the number thereof, until in 1903 they were limited to four, increased in 1907 to twenty-four, reduced in 1919 to nine which was re-enacted in the 1937 Highway Code. Pursuant to this authorization, and undoubtedly realizing that lack of transportation facilities in the early days made it impracticable to maintain but one road district, the commissioners in response to petitions from residents of new areas that were continually being opened up, gradually increased the total number of road districts from one in 1854 to one hundred in 1902.

They also had to change the boundaries of those districts close to Seattle each time the city annexed suburban territory. After 1902 road districts were reduced in number to within the limits required by legislation; 1903-1907 there were four, 1908-1909 five, 1910 six, 1911-1912 seven, 1913-1919 eight, 1920-1925 nine, 1926-1927 two, 1928 three, and since then only two, called Road Districts Nos. 2 and 3, and located within the corresponding commissioners districts.

It is interesting to note that the reduction in the number of districts in 1903 coincided with the growth of transportation facilities. The reason is quite apparent. With roads leading to nearly every inhabited portion of the county it was easy for workers, equipment and material to be transported from place to place. Having reduced from one hundred to two road districts it may be possible that the present extensive system of highways will cause history to repeat itself and that only one district for the entire county will again be created, as it was in 1854.

SUPERVISORS

In tracing the growth of the number of road districts and their gradual reduction to two, it must not be overlooked that the supervisor rose and fell with his district.

In those pioneer years a great deal of responsibility and authority was given him by legislation. Aside from the surveyor his was the only position in the entire county road administration continuously recognized by law, until the passage of the 1937 Highway Code. While the surveyor and subsequently the engineer had to be qualified, it appears never to have been a requirement for the supervisor, appointed or elected. Perhaps that goes back to the time when there were not enough experienced men to fill the supervisor positions as fast as new road districts were created. That situation does not obtain today, but it probably never occurred to each succeeding legislature to amend the laws to provide that supervisors be technically qualified.

The method of selection has varied almost from year to year. At first, on April 19th, 1854, it was decreed that supervisors be appointed annually by the commissioners, but by December of the same year another act provided for annual elections in each district, the county auditor to fill any vacancies. In 1865 elections were to be held every two years and again in 1867 annually. Two years later the legislature re-enacted the appointment method of 1854, in 1871 changing it once more to an annual election, with the commissioners to fill all vacancies. In 1890 the title was changed from supervisor to overseer with elections every two years, excepting for those districts petitioning commissioners to make an appointment. By 1893 the title of supervisor was resumed, with elections to be held annually and commissioners to fill vacancies. Changed in 1901 to provide for appointment by commissioners, in 1907, 1915, and 1919 the selection was to be made from a list submitted by the Good Roads Association. By 1926 the commissioners again had authority to make their own choice and this method remains in effect to this day, although no longer expressly mentioned in legislation. It would be very interesting if the names of road supervisors had been preserved, as many pioneers served in that capacity. The most outstanding of which there is a record, is the appointment of H. L. Yesler as Supervisor of the Seattle Road District (presumably No. 1) in 1858.

The pay of supervisors was very elastic. From $3.00 for each day's work in 1854 it was in 1865 left to the commissioners' discretion, reverting to $3.00 in 1869, down to $2.00 in 1871, up again in 1879 to $2.50, limited in 1890 to 50 days work at $2.50 plus 15 per cent of road poll tax collected, in 1901 set at $4.00, and by 1919 compensation as determined by the commissioners, as it is today.

Supervisors' duties in the early history of the county were so multitudinous as to make them virtually independent, except for the gentle control which the county

commissioners exercised as a unit. This continued to be the situation until 1890, when for the first time the commissioners were recognized as the managing heads of the road system and given real powers. In that year too, commissioners' districts were formed, and the head of each was designated ex-officio road commissioner. Legislation in 1854 required supervisors to:

1. *Assess and collect road taxes.* The first tax of four mills in 1853 was for general revenue, which the supervisor was delegated to receive. For 1854-1855 the tax for road work alone was four mills and the supervisor both assessed and collected it. Beginning in 1856 the commissioners levied the taxes, the first being two and one-half mills for road property and $9.00 for road poll taxes. These the supervisors continued to collect for a long, long time until all road taxes were ordered collected as for general county revenue.

2. *Assess work on those liable by law to perform labor on the roads in their district, in payment of taxes.* This continued until 1913 when the road poll tax law was abolished.

3. *Turn over to the county sheriff for collection all tax delinquencies.* The procedure varied, as well as the penalty, which was decreed as low as 10 per cent and as high as 25 per cent.

4. *Construct and maintain all public (excluding private) roads in his district.* By 1890 construction was turned over to the commissioners, who delegated the supervisors to do the work, if by day-labor.

5. *Purchase and maintain needed equipment.* This regulation is still in effect, excepting that equipment over $500.00 is purchased on bid.

6. *Take from adjoining lands materials necessary for road purposes.* As early as 1907 the commissioners were authorized to acquire and operate quarries and purchase rock crushing machinery, four years later gravel pits being included, so that the arbitrary action delegated to the supervisor by law no longer was needed.

7. *Enter on adjoining lands to construct ditches necessary to preserve roads.* Today easements are first obtained from abutting property owners.

8. *Erect and maintain directional signs on highways.* Still under the care of the supervisor, including safety signs.

9. *Keep account of work performed, monies collected and expended, and make annual settlement with commissioners.* Accounts are still being kept, but by the central accounting division, attached to the county road engineer's office. Settlement with commissiones has not been necessary for years now, because the supervisors for a long time have handled no money, tax collections being made by the county treasurer. Payments are made by the same official on warrants prepared by the county auditor based on vouchers signed by the supervisors, and approved by the county road engineer and commissioners.

These duties were reaffirmed by succeeding legislatures, and in 1865 the supervisors' additional functions were to:

10. *Make annual inspection of roads and bridges reporting condition to commissioners with estimated cost of construction and repairs.* This is now the function of the county road engineer, with especial reference to bridges, though supervisors still make road inspections.

11. *Appoint deputies as overseers with compensation for actual work done.* This is now the prerogative of the commissioners, who appoint all foremen and other help, and who determine the compensation whether monthly or daily.

With very few changes in the law the supervisor continued to function under these rules and regulations until 1890 when he was placed under the direction of his road commissioner, thus ending his more or less independent status. His duties were outlined:

1. *Take charge of highways, and employ men and utilize equipment to do the work.* Although the road poll tax was still in effect and residents had either to work it out or pay the tax, it is probable that many elected the latter course, necessitating the employment of labor at regular pay, subject to the approval of the road commissioner. In 1895 county road employees were first given an eight hour day, with pay of $1.50 per day for individuals and $3.25 for man and team, increased by gradual stages to $2.25 and $4.75 respectively. Today union rates are paid in all branches of road work.

2. *Have no interest in contract work in his district.* The same rule applies today, except that the handling of contract projects is the function of the county road engineer.

3. *Maintain the roads in his district.* There has been no change.

4. *Grade the banks of roads.*

5. *Make quarterly reports of employment, materials and equipment.* Instead of annual settlement with commissioners.

Further legislation and regulations charted the course of the supervisor. In 1893 he was directed not to spend any money for repair and improvement of roads without prior consent of the commissioners and to supervise all work ordered by them. He was to apply all labor liable to work on the roads in payment of taxes, but the claims submitted for such labor were to be approved by the commissioners before payment was made. Two years later he was ordered not to do any work payable out of road district funds unless authorized by his road commissioner, and all road poll tax monies collected by the supervisor were not to be expended by him but turned over to the county treasury. By 1898 a resolution of the Board of County Commissioners was necessary before supervisors could begin any project to be paid out of road and bridge funds.

Much the same system is in effect today, all acts of the supervisor requiring the approval of his road commissioners.

ROAD WORK IN LIEU OF TAXES

A species of forced labor due to the scarcity of man power in the earliest days was that legislation of April 19th, 1854 which directed all males between the ages of 18 and 50 excepting ministers, the infirm, and public charges, to work on the roads for three days in each year. This work was assessed, or applied by the supervisor, who was also required to exact one day's additional labor for each $1,000.00 valuation of taxable property. Amended in December 1854, the exemption of ministers was withdrawn, and the supervisors were made to assess a road property tax of three mills payable in work or money at the option of the taxpayer.

The first assessment made by the county commissioners was in 1857, being a $9.00 road poll tax and a two and one-half mill property tax, which varied with each legislative session, and money secured from these sources was to constitute a road fund, later known as the road district fund. By 1875 it was decreed that residents of cities were exempted from these levies. Collections were at first made by the supervisor, but subsequent legislation permitted the treasurer and auditor to do so, with the sheriff collecting delinqeuncies adding thereto a penalty of 10 per cent, and in some years as high as 25 per cent.

ROAD TAX RECEIPT.

I hereby certify that Ayle Hanson has paid to me the amount of Nine -- dollars and 48 cents, in full, in discharge of his Road Tax for the Year 1875

B. L. Smith

Supervisor.

Road District No. 16, King Co W. T., 1875

July 16-1875

Bring this Receipt with you when paying other Taxes.

Supervisor will leave blank

Received ..... 190..
Applied on 190.. R. E. tax. R. No. ..... $.....
Applic on 190.. R. E. tax. R. No. ..... $.....
Applied on 190.. R. E. tax. R. No. ..... $.....
Applied on personal tax Roll No. ..... $.....
Total, $.....

This side MUST be written in ink.

Certificate of "Road Property Tax" Worked Out No. A 510

THIS IS TO CERTIFY That Sara A Rutte has worked as follows on Roads in Road District No. 16 on account of his Road Property tax for the year 190.1, on the dates shown on the back hereof.

5/8 Days work at $2.00 per day . . . $ 1.29

..... Days work with team at $4.00 per day, . . $.....

Total, ... $ 1.29

Which said amount shall apply on his "Road Property Tax" ONLY.
If issued for more than the amount as shown on list sent out by County Treasurer, a deficiency Certificate will not be issued for said excess.

Dated May 22 1902

NOTE—File this Certificate with list of property to be paid on, with the County Treasurer who will apply it on account of Road Property Tax for 190....

Supervisor Road District No. 1, King County, Wash.

THE METROPOLITAN PRESS, SEATTLE.

ROAD WORK IN LIEU OF TAXES
Showing Types of Receipts or Certificates

As to those liable to work out their taxes, the age limits were always 21 to 50. Up to 1867 they had to work where necessary, but in that year they were limited to labor in the road districts in which they lived. Originally exempted were ministers, infirm and paupers, with the first named included later in the year. In 1866, Chinese refusing to pay the levy, the commissioners ordered the supervisors to force them to work out their taxes. Next year Indians were exempt, in 1879 aliens included, in 1881 firemen and the insane or idiotic exempt, and beginning about 1901 no exemptions were specifically mentioned. Employers were at all times liable for the road tax of their employees. Each person working on the roads received a labor certificate from the supervisor, at rates varying from $2.00 to $3.00 per day, a man with road equipment receiving $4.00 daily. These certificates at one time were good only for the amount of the road tax, were later made valid for subsequent years' taxes of the certificate holder where more labor was performed than assessed, and by 1881 such excess certificates could be transferred to discharge the labor of another person. Refusal to work at the request of the supervisor resulted in a penalty up to 20 per cent. By March 21, 1913 the road poll tax law was abolished and levies from then on were made both for road district and road and bridge funds.

Though not required to work on roads to liquidate their taxes, prisoners in the county jail were not allowed to vegetate. From the earliest years they were made to labor on the public highways and as early as 1870 the commissioners ordered the sheriff to utilize their services. By 1907 legislation was introduced ordering male prisoners to work on county roads under the commissioners, and as late as 1913 state prisoners could also be employed on public highways under state supervision and with pay.

ROAD CLASSIFICATIONS AND DESCRIPTIONS

Legislation has so frequently reclassified state and county roads, that a review of this subject seems essential in determining the kinds of roads which came under the jurisdiction of the county and the state in the course of the development of the road system.

STATE

The first territorial roads in 1854 were called public highways, to which in 1859 were added all military roads. Ten years later all were declared county roads (probably because the county built them in the first place, and maintained them since). However, as new highways at distant points were established by the legislature, with funds to build them, they were in 1907 defined as state roads, meaning those in sparsely settled and mountainous regions where the entire expense of engineering and construction came from the state public highway funds. The 1907 statute provided that they be designated by legislation and for the first time they were numbered.

By 1913 state highways were divided into primary and secondary, the first named to be described by an act of the legislature, and to be constructed and maintained from the public highway fund, and all not so designed to be called secondary, for construction from the same fund but to be maintained by the counties. Four years later the maintenance of state primary highways was also turned over to the counties, to be financed from the permanent highway maintenance fund.

By 1933 all roads previously established as state primary and secondary, were known as primary highways, but in 1937 they were again called primary and secondary roads, both to be established by the legislature, the former to be designated by number and name and the latter to be branches thereof with convenient numbers assigned to them. This is the system in effect today, with construction and maintenance costs coming from the state allotment in the motor vehicle fund.

COUNTY

All county thoroughfares established on petition and surveyed were in 1854 classed as public highways, and those constructed by individuals to connect their residences with a public thoroughfare were considered private roads, which are explained below in greater detail. By 1867 all, excluding those privately constructed, which by that time were opened and had been traveled were declared to be county roads, which in 1869 included all territorial highways lying within the county. Ten years later private roads were designated as public roads, though still used for their original purposes. Then came turnpike roads in 1890, which ushered in a new standard of construction, rather than designating a classification, the first of these being petitioned for in 1902 for South Seattle. In 1893 the first assessment or bonded improvements were provided for, called popularly the Donohue Law roads, and they will be treated separately herein. A departure in financing came in 1907 when state aid roads were introduced, consisting of improved highways along main lines of travel, the cost to be shared by the state and county out of the state public highway fund. Of a similar nature were permanent highways authorized in 1911 to connect trade centers, to be financed out of the permanent highway fund and maintained from the permanent highway maintenance fund. Of course these were at all times county roads, though they received new designations with each act that provided for special means of construction or financing. In 1929 came the law classifying as lateral roads all those in the county which were not state highways, but which connected with them, to be financed out of the lateral highway fund. By 1933 all thoroughfares in the county not established as state primary highways were called secondary roads to be financed from the fund of that name. A revision in 1937 classed state highways as primary or secondary, so that public thoroughfares in the county were finally designated by the name which most aptly describes them—county roads, to be built and maintained from the fund called by that title.

Private Roads

Though provided for as early as 1854, it was only in 1869 that the procedure for constructing them was detailed, being similar to county public roads, as to petition, viewers, width (30'), damages to be assessed if crossing the lands of others, etc. Giving residents connection with public highways, it was distinctly stated that no county funds could be used in their construction or maintenance. The first such road built was petitioned for by Mr. F. McClennan in 1861 to run from his house across the claim of Charles Benson to the public highway, which is now known as County Road No. 11. Though in 1879 these were designated as public roads they were still privately used, and they did not become part of the county system until about 1890.

Toll and Leased Roads and Bridges

Legislation permitting the construction of such improvements was passed for the first time in 1854, probably for the reason that the newly established counties had neither the manpower nor the resources to project highways in too many directions. Hence individuals were privileged to build bridges and/or roads and to charge tolls, with the county reserving the right to appropriate the improvement if necessary in the public interest at a value to be determinted by three disinterested persons. In 1864, confirmed five years later and again in 1881, it was decreed that in cases where a labor shortage existed the commissioners were to have authority to lease to the highest bidder for a ten year period the privilege of building proposed roads. The lessee was empowered to collect tolls, but not from pedestrians, such projects being deemed county highways. The lease and toll system continued in effect until towards the close of the last century and all such private improvements have long since been taken over by the county.

Since then activities have been confined to the granting of franchises for the construction, operation and maintenance of toll bridges. In 1919 and again in 1927

To the honorable Commissioners Court
of King, Co, W.T.

The undersigned makes application to your honorable body, That a private Road be located from the undersigned's house and from thence across the claim of Charles Benson to the public highway.

Franklin McLellan

To the Honorable Commissioners of K C W.T.

Agreeable to an order issued by your Honorable body at your May term A.D. 1861 appointing the undersigned viewers to view and locate a privet road across the claim of Charles Benson and assess the damage thereof: we the undersigned have viewed and located the said road, as follows

Commencing at the house of F. McClellan thence ~~running~~ west ~~about fifteen~~ across the Benson claim 80 rods thence a little south of west about one half mile to the public road on the East bank of White river.

We therefore agree that there is no damage sustained by the locating of said road.

all cost being paid we therefore beg leave to submit this report to your honorable body.

Viewers

November 1 1861

H. P. C. Bryant

D. A. Neely

FIRST PETITION AND VIEWER'S REPORT FOR PRIVATE ROAD
Known as County Road No. 11

the commissioners were empowered to do so for a period not to exceed 50 years, with the right of the county to acquire such bridges at the expiration of the franchise, or if the terms thereof were violated; or by purchase, right of eminent domain or condemnation. By 1934 commissioners were authorized to construct and operate toll bridges, issuing bonds to pay for the improvement, said bonds to be retired from tolls and other bridge revenue, fees no longer to be charged once the bonds were redeemed.

In a general way, the development of road improvements by private initiative has shifted from the collection of tolls to pay for them, to the method of issuing bonds or assessing petitioners, with the highways being free to the public. This brought about much legislation devoted to so-called assessment or bonded roads.

Assessment and Bonded Roads

The first bonds ever issued by the county for road purposes (and they were really scrip or anticipation warrants) related to the Snoqualmie Pass Highway. At various times when county funds were insufficient, the legislature has authorized the counties to raise money or to issue bonds for road and bridge purposes, on approval by the voters, with power to levy taxes to retire them. Such authority was given at various times as in 1867, 1890, and again in 1913 when county road bonds in the amount of about $3,000,000.00 were issued, and taxes levied to redeem them. In 1933 they became an obligation payable out of the secondary and subsequently the county road fund.

In 1893 the so-called Donohue Road Law was enacted, providing for the construction of thoroughfares connecting with city limits or with trade centers. Necessitating a petition by owners of at least 51 per cent of the linear frontage and property of at least $10,000.00 per mile the cost of the improvement was to be shared by the county, the road district, and the property owners by the assessment method, or if county funds were insufficient to advance construction costs, then by the issuance of bonds on approval of the voters. This legislation was re-enacted in 1927 eliminating the property requirement in the petition. Under the first act twelve roads were petitioned for, and eight of them built, for a total of 19.04 miles at a cost of approximately $520,000.00, the last one being completed in 1925. Between 1930 and 1932, under the legislation of 1927, twelve out of thirteen petitioned improvements were constructed, 26.20 miles long, costing about $580,000.00. As with county road bonds, these are now payable out of the county road fund.

In 1909 the creation of local improvement districts for county road construction at the expense of property benefitted was authorized, with provisoins for the levy of special assessments against such land to retire the cost of construction, which in the meantime was to be financed by the sale of L. I. D. warrants. It does not appear that any communities took advantage of this act.

By 1917 another form of district was provided for. On petition of twenty-five or more desiring transportation to market by the construction of a trunk highway to connect with water facilities, railroad or an existing highway, an election was to determine the organization of an independent highway district and the sale of bonds to finance construction, to be retired by assessment against property benefitted. The county was not to be financially interested, but it appears that when the depression made it difficult for the districts to meet their obligations, legislation in 1931 permitted Class "A" counties to take them over and pay their obligations from the road and bridge fund. Two years later payment was authorized from the secondary and later from the county road fund of all counties.

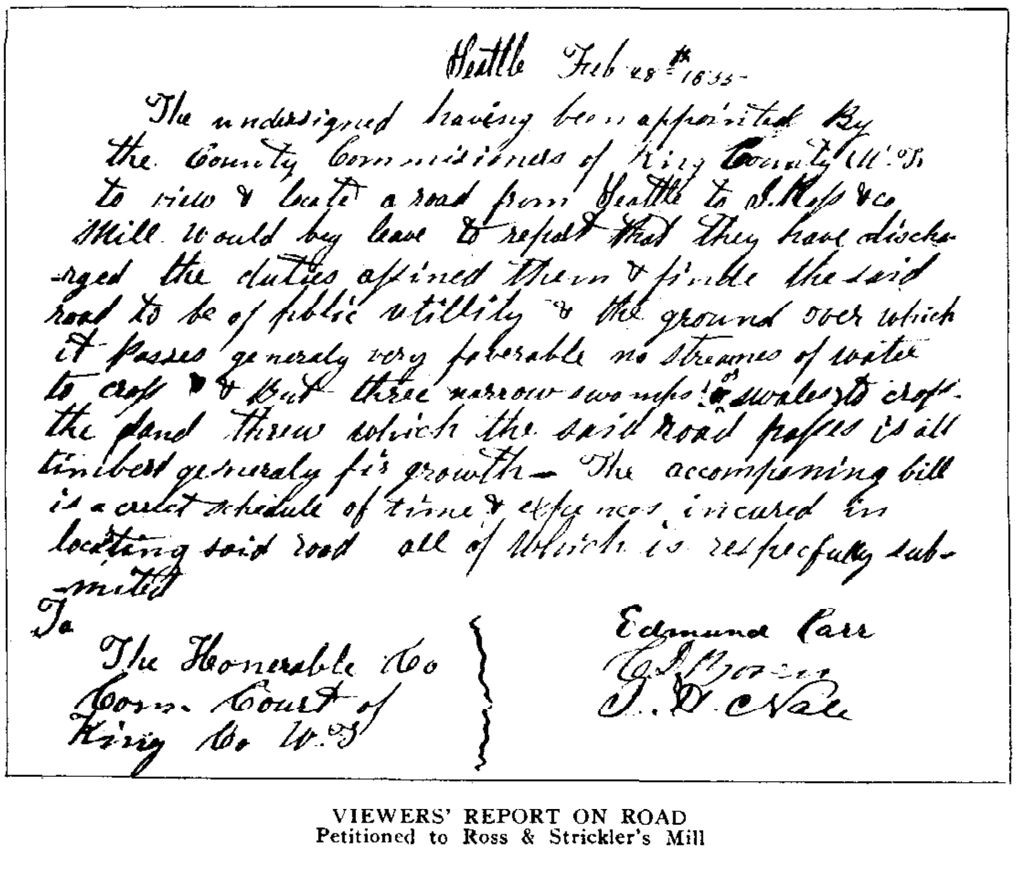
Road Widths

Though the running surface of roads has increased from ten to twenty-eight feet, it is interesting to note that the first legislature in 1854 decreed a right-of-way

width of sixty feet for public roads (but only thirty feet for those privately used), which the 1937 highway code has not changed except to permit the commissioners to adopt a different width. Between those years legislation has provided for various widths of right-of-way, from as narrow as thirty feet in 1890 to one hundred and twenty feet in 1926, sometimes to be determined by the viewers, and at times to be recommended by the surveyor. The actual running surface of roads, however, does not show such a wide variation from year to year, but demonstrates the development of highways from the horse-and-buggy days to this era of high-speed transportation. Originally ten to twelve feet wide with suitable turnouts at convenient distances, by 1890 sections sixteen to eighteen feet in width were planned, which about 1913 was increased to between eighteen and twenty feet, the minimum later being twenty feet until at present road sections are from twenty-two to twenty-eight feet wide, excepting four-lane highways which have a forty-four foot running surface.

PROPOSED LEGISLATION

In preparation for submission to the legislature during the coming year is what is known as the Highway Improvement Act, designed to meet conditions where improvements are of direct and special benefit to the petitioners. Its provisions are made applicable to sidewalks on existing roads as well as to their construction as part of any new road project. It is planned to share the expense of construction by assessing counties 25 per cent, road districts or townships through which the improvement passes 25 per cent, and the lands benefitted 50 per cent. Federal grants may be accepted towards the cost of the improvement. An attempt was made at the last session of the legislature to have such a statute enacted, but it will be re-submitted in the hope that it will pass during the coming year.



Seattle Feb 28th 1855

The undersigned having been appointed By the County Commissioners of King County W. T. to view & locate a road from Seattle to J. Ross & co Mill would beg leave to report that they have discharged the duties assined them & find the said road to be of public utility & the ground over which it passes generaly very foverable no streames of water to cross & but three narrow swamps or swales to cross. the land threw which the said road passes is all timbered generaly fir growth — The accompaning bill is a correct schedule of time & expences incured in locating said road all of which is respecfully submitted

To The Honerable Co Com. Court of King Co W. T.

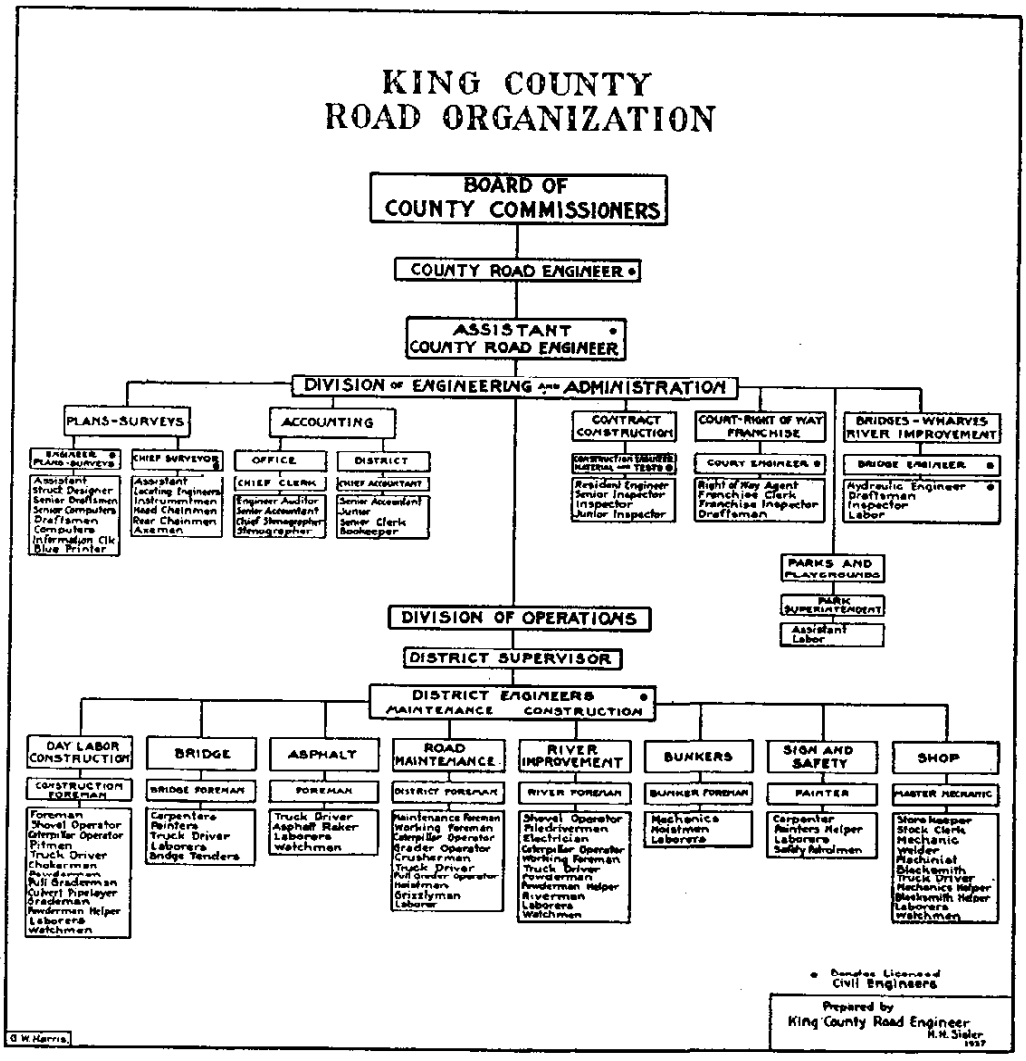
Edmund Carr
[illegible]
[illegible]

VIEWERS' REPORT ON ROAD
Petitioned to Ross & Strickler's Mill

HIGHWAY ADMINISTRATION IN KING COUNTY

Though it has been the aim of the county road engineer's office to follow as nearly as possible the structure set up by the state highway department, different conditions existing in King County, and the many non-road functions assigned to its county engineer, make this impossible and inadvisable.

Under the direction of the county commissioners, the county road engineer, with the help of an assistant, supervises road activities and related matters, and assists in the engineering connected with river improvement, flood control, parks and playgrounds, etc. These functions fall into two general divisions: Engineering & Administration and Operations, with licensed engineers occupying all executive engineering positions.



DIVISION OF ENGINEERING AND ADMINISTRATION

This supervisory division takes care of all engineering and accounting for the county road engineer's office and the two road districts. Field inspection of projects is also maintained by district engineers on the staff, though in the foregoing chart they are shown under the operations division.

Plans and Surveys. Where the state has but one executive in charge of this function, the multiplicity of small surveys in King County requires a chief survey engineer who has the direction of all survey parties. He receives orders through the engineer of plans and surveys (office engineer) who is in charge of all activities in the drafting room.

Bridges—Wharves—River Improvement. The bridge engineer, in addition to bridges, has the care of docks and wharves and the engineering in relation to river improvement and flood control, which is exercised by a hydraulic engineer on his staff.

Contract Construction. While the state department has a construction engineer in charge of all field work, King County does not have enough contract construction to duplicate this arrangement, so that the material and tests engineer doubles in the capacity of construction engineer.

Accounting. Though the state has an accounting division in each district, King County divides the accounting work between the chief clerk in charge of office accounting and routine, and a chief accountant who takes care of all road district accounting.

Court—Right-of-Way—Franchise. In charge of a court engineer, this corresponds to the state right-of-way engineer.

Parks and Playgrounds. The county road engineer has the supervision of a park superintendent for each road district.

DIVISION OF OPERATIONS

The organization as shown in the chart is duplicated in each road district, and does not follow the pattern of the state highway district offices. In the county, a supervisor is placed in charge of each district instead of an engineer as in the state. Further, to supply the needed engineering help which state district offices have, construction aand maintenance engineers from the county road engineers staff are assigned to the road districts. District accounting and office matters are handled through the chief accountant.

Each road district is divided into four areas, each in charge of a district foreman concerned principally with maintenance. All construction, exclusive of contracts, is performed through a construction foreman for each district. Bridge, asphalt, bunkers and river improvement branches of district operation are each under the care of a foreman, the first two named doing both construction and maintenance work. Signs and safety is in charge of an experienced painter, and the shop is under a master mechanic.

HIGHWAY EXPENDITURES FROM ALL FUNDS

(1854 to 1939 Inclusive)

Originally, expenses for road matters were taker from whatever source the county had available, until in 1857 the legislature decreed that road poll and property taxes were to constitute a road fund for the use of the district wherein collected. This is the first instance of a separate account for road expenditures, and it was the only fund for such purposes until in 1867 the commissioners were authorized to raise $6,000.00 for general road and bridge construction and maintenance, which initiated such a fund for the first time. Thus by 1867 there were definitely established the road and bridge fund. and the road fund, although it was not until 1876 that expenditures began to be segregated in the commissioners and auditor's accounts.

To replenish the road and bridge fund the legislature authorized the commissioners at various times beginning in 1875 to make appropriations from the general fund, and by 1881 the amounts began to be based on the classification of the counties as to population. For that year, too, a special levy of two mills was for the first time definitely passed for the road and bridge fund, but the main source of income was still by appropriation from the general fund.

By 1890 the road property tax was in part apportioned, 20 per cent to the general road fund for county-wide highways and to help impoverished districts, and 25 per cent to the bridge fund. The road poll tax had 25 per cent assigned to the general road fund, the balance remaining in the districts where collected. If any district still had inadequate funds it could vote to levy special taxes and the first to do so was Road District No. 39 (Enumclaw), which voted five mills in 1891. Two years later it was decreed that all road poll and property taxes were to be used in the district where raised for road maintenance, whereas an annual levy was to be made for the road and bridge fund, to be used for the county generally, and to help districts in need.

By 1913 the use of the two funds was definitely clarified, road and bridge monies being utilized for the benefit of the entire county for roads, bridges and wharves designated as main thoroughfares, whereas the road district fund was to be used for similar purposes, but only in the district wherein the improvement was located. This remained in effect until the first named account was abolished in 1933, though road district funds, still raised by taxation, are to this day utilized in the districts where collected.

Meantime special funds were created from time to time up to the present, for the purposes specified:

Turnpike roads, in 1890, financed by means of a bond issue with tax levy to cover interest payment and retirement.

Road improvement fund in 1893, re-enacted in 1927, in which was deposited proceeds of assessments used to retire the Donohue road law bonds (long since made a direct obligation of the county).

State public highway fund raised by a tax which varied with each legislature, on all property in the state. Initiated in 1905, it was abolished in 1923, having been used for state highway purposes, and for a time to provide state aid to counties.

State permanent highway fund created in 1911 to be used for permanent highway construction until discontinued in 1933. It was to be raised by a state property tax which varied, in 1915 including motor vehicle fees, all allotted to each county in proportion to the amount of same collected within its boundaries.

County permanent highway maintenance fund established in 1917 and abolished in 1933. It received its monies from the motor vehicle fees deposited in the permanent highway fund plus five per cent of the amount raised by taxation in that fund,

increased in 1921 to from five to fifty per cent. This was used for the maintenance of permanent and state primary highways located in the various counties.

Motor vehicle fund, first created in 1921, into which were deposited fees for vehicle operation, licenses, etc., and for the first time a liquid fuel tax, commonly called gas tax revenues. This fund was apportioned to counties on the basis of percentages determined at each session of the legislature. King County's share has been 20.11 per cent, reduced in 1939 to 14.53 per cent. The motor vehicle fund is today a permanent account, and is used for state highway purposes and is the source, by transfer, of special county funds created at different times such as the primary highway maintenance, secondary highway and county road funds.

Lateral highway fund created in 1929, for which a special tax on fuel was levied in addition to the amount raised for the motor vehicle fund. This was used for lateral highways and was credited to counties, in the proportion of one- half to all counties, one-fourth in accordance with the number of motor vehicles therein, and one-fourth as to the number of farms. This fund was abolished in 1935, for which year the distribution was made on the basis of percentages, King County receiving 20.11 per cent.

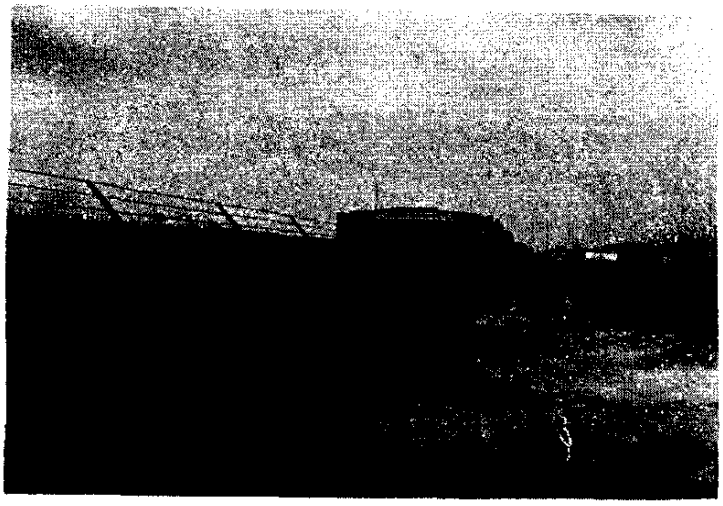
Secondary highway fund created in 1933 out of the motor vehicle fund for the construction and maintenance of secondary roads, was abolished in 1937 to be replaced by

County road fund, into which is deposited not only the allotment from the motor vehicle fund but also road district and any other funds used for road purposes.

From all of these funds, including right-of-way costs and county engineer's budgets a recapitulation has been made of the total highway expenditures in the county since the bginning. Prior to 1887 the information has been compiled by the laborious process of examining all the original documents in the commissioner's and autditor's files. Since that date details have been gathered from the auditor's reports.

For the years 1856-7-8 there were practically no expenditures on roads, explained by this entry in the commissioners' proceedings on March 3, 1856: "Owing to the present deranged state of the financial matters in our county, caused by an Indian war now existing, we suspend for the present all road matters in this county."

The figures for the years up to 1887 are not at all conclusive. First of all county prisoners performed labor on the roads without any record being kept thereof. Then too, very few accounts of the early supervisors are available, and inasmuch as most of the work was done under their independent rule, principally in discharge of the road poll tax, the amounts for these years must be considered as approximate.



BOEING FIELD
Showing New Fence
Just Built

YEARLY HIGHWAY DISBURSEMENTS

(1854 to 1939 Inclusive)

Year	*Amount*	*Year*	*Amount*
1854	$ 671.90	1897	86,694.96
1855	1,039.24	1898	104,463.10
1856	31.50	1899	144,170.23
1857	.....	1900	189,141.85
1858	13.25	1901	183,179.30
1859	857.76	1902	199,968.54
1860	1,381.96	1903	268,450.22
1861	260.82	1904	230,915.28
1862	310.35	1905	228,509.20
1863	1,937.53	1906	353,451.19
1864	1,022.31	1907	372,663.75
1865	2,147.32	1908	516,557.15
1866	4,176.15	1909	454,815.65
1867	1,664.33	1910	578,553.40
1868	4,483.87	1911	914,713.32
1869	5,543.29	1912	796,975.28
1870	8,904.31	1913	933,099.07
1871	4,417.45	1914	1,888,482.20
1872	6,128.11	1915	2,404,638.86
1873	5,055.23	1916	1,867,497.80
1874	3,953.95	1917	1,827,647.41
1875	2,360.63	1918	1,858,249.92
1876	14,325.48	1919	796,975.28
1877	9,973.44	1920	2,307,962.83
1878	11,174.15	1921	1,900,728.29
1879	12,857.31	1922	1,714,928.33
1880	12,970.70	1923	1,672,372.95
1881	5,142.98	1924	1,532,654.77
1882	12,198.98	1925	1,609,962.37
1883	9,883.90	1926	1,503,788.15
1884	21,092.18	1927	1,364,153.52
1885	18,331.92	1928	1,591,595.56
1886	26,832.03	1929	1,756,822.91
1887	28,811.07	1930	2,233,888.68
1888	55,772.51	1931	1,903,766.24
1889	42,008.00	1832	1,823,175.62
1890	65,072.87	1933	1,724,828.66
1891	110,369.41	1934	1,460,957.14
1892	128,835.05	1935	1,964,221.58
1893	93,269.91	1936	2,230,930.78
1894	116,623.41	1937	1,676,544.19
1895	62,153.46	1938	1,743,948.98
1896	71,294.07	1939	1,442,543.29
TOTAL			$ 54,366,455.28

CLASSIFICATIONS OF EXPENDITURES FROM ALL FUNDS

(Covering a Ten-Year Period: 1930-1939 Inclusive)

In the following table expenditures from all funds in both road districts have been combined and classified according to divisions set up by Sec. 56, Ch. 187, Session Laws of 1937. For 1930 to 1932 inclusive, the figures represent the total of the road and bridge, permanent highway maintenance, and road district funds. The first two mentioned having been merged by law in 1933 into the secondary highway fund, the sums indicated below to April 1937 record the total of that fund and road district monies. Since April 1937, the county road fund has absorbed all others, and the totals include motor vehicle, road district, current expense (emergency) and other funds utilized in road operations.

The same Sec. 56, Ch. 187, Session Laws of 1937 requires that not less than 50 per cent of the motor vehicle fund apportioned to King County be used for Construction, the balance to be applied in certain percentages to Maintenance, Bond and Warrant Retirement and Overhead and Operations. Percentages have therefore been computed to show what proportion construction bears to funds originating with the state, and to total disbursements from all funds. For the remaining classifications the percentages have been calculated on total expenditures. Amended in 1939 no fixed percentage for construction is mandatory.

Up to April 1937, there being no legal provision for an Overhead and Operations account, approximately 75 per cent of the county engineer's current expense budget has been applied to cover the necessary road administration and supervision, together with incidental expense thereto. Since that time a proper administration accounting has been kept, which includes supervisor charges, transportation, materials and supplies, office expense, etc., whether originating in the county engineer's or road district budgets.

The figures are based on an exhaustive analysis of the county auditor's reports for the years mentioned. They differ from the totals arrived at by the county engineer's central accounting division, principally because of an unavoidable lapse of time between the recording of disbursement vouchers in the respective offices.

Year	CONSTRUCTION			MAINTENANCE		BOND-WARRANT RETIREMENT		OVERHEAD & OPERATIONS		Total Expenditures
	Amount	% To State Funds	% To Total Funds	Amount	% To Total Funds	Amount	% To Total Funds	Amount	% To Total Funds	
1930	$1,024,372.10	38	48	$ 999,619.14	46	$ 30,615.00	1	$ 108,141.57	5	$ 2,162,747.81
1931	663,899.00	40	38	950,704.76	54	39,962.58	2	103,992.69	6	1,758,559.03
1932	421,117.36	32	28	946,598.20	63	48,514.04	3	95,218.18	6	1,511,447.78
1933	535,895.85	45	33	940,518.30	58	79,066.22	5	75,272.43	4	1,630,752.80
1934	477,805.76	54	35	756,865.60	56	61,646.83	4	63,810.54	5	1,360,128.75
1935	379,140.36	28	21	1,339,987.47	72	54,410.06	3	77,760.39	4	1,851,298.28
1936	491,950.17	26	23	1,505,075.11	71	53,004.87	2	78,047.43	4	2,127,077.58
1937	351,542.02	26	24	983,325.32	67	49,599.68	3	93,487.73	6	1,477,954.75
1938	897,103.00	52	57	557,561.59	36	47,194.49	3	66,231.92	4	1,568,091.00
1939	436,814.17	39	33	705,669.19	53	101,441.50	8	82,101.99	6	1,327,026.85
Total	$5,679,639.79	38	34	$9,685,924.68	58	$864 445.27	3	$ 844.064.87	5	$16,775,084.61
Yearly Average	$ 567,963.98	38	36	$ 968,692.47	58	$ 56.444.53	3	$ 84,406.49	5	$ 1,677,508.46

DISTRICT EXPENDITURES FROM ALL FUNDS

(Covering a Ten-Year Period: 1930-1939 Inclusive)

All expenditures of the two road districts for a ten-year period are outlined below. Engineers current expense and county wharves budgets are not included. State funds include road and bridge, permanent highway maintenance, secondary highway and county road. The tabulation shows that while disbursements from road district funds were higher than last year, they were still well under the average for the past ten years. Total district expenditures are not only under this average, but for District No. 2 the lowest except 1932 and 1934, and for District No. 3, lower than any year but 1934.

Year	SOUTH DISTRICT NO. 2				NORTH DISTRICT NO. 3			
	State Funds	Road District Funds	River Improvement	Total	State Funds	Road District Funds	River Improvement	Total
1930	$ 553.747.86	$ 271,067.05	$ 39,855.04	$ 864,669.95	$ 427,841.84	$ 313,173.21	$ 39,221.84	$ 780,236.89
1931	503,606.48	216,337.75	33,913.27	753,857.50	489,695.16	319,632.82	41.100.15	850,428.13
1932	450,666.27	215.784.67	40,036.40	706,487.34	481,984.85	255,429.61	44,967.83	782,382.29
1933	593,474.90	212,983.07	61.303.44	867,761.41	524,714.96	205,054.35	26,453.35	756,223.66
1934	471,800.82	197,039.75	48,989.07	717,829.64	382,024.40	240,620.47	40,889.29	663,534.16
1935	725,204.33	223,098.17	98,925.14	1,047,227.64	586,801.06	238,434.33	92,669.15	917,904.54
1936	992,801.55	73,815.90	134.006.00	1,200,623.45	896,464.06	85,948.58	153,708.18	1,136,120.82
1937	669,120.69	72,872.84	98,716.85	840,710.38	619,852.45	88.825.33	133.607.30	842,285.08
1938	655,546.88	67,895.24	99,436.43	822,878.55	762,194.90	82,453.98	133,648.92	978,297.80
1939	583,129.66	72,565.99	88 269.02	743,964.67	524,506.46	89,380.83	97,811.34	711.698.63
Total	$6,199,099.44	$1,623,460.43	$ 743,450.66	$8,566,010.53	$5,696,080.14	$1,918,953.51	$ 804 077.35	$8,419,111.00
Yearly Aver.	$ 619,909.94	$ 162,346.04	$ 74,345.07	$ 856,601.05	$ 569,608.01	$ 191,895.35	$ 80,407.74	$ 841,911.10

CONSTRUCTION

All projects are under the general supervision of Assistant County Road Engineer James H. Marshall, contracts being under the direction of Construction Engineer Frank Crook, and day-labor jobs under District Engineers Harry Gillis for the south and Clinton Matteson for the north district.

The tables which follow show a total of $540,277.67 in construction completed in 1939, including W. P. A. labor. The accounting record of $441,978.01 does not agree, because W. P. A. participation is not listed by them and because only their actual construction expenditures for 1939 are detailed. some on projects carried over from 1938, and others on 1939 jobs not yet completed. The accounting total also does not tally with the county auditor's record of $436.814.17, because of the necessary delay in issuing warrants against disbursement vouchers.

Based on the auditor's figures, which record the actual warrants drawn for the year 1939 against construction projects, only 39 per cent of county road funds have been utilized for construction, which falls 11 per cent short of the formerly required 50 per cent.

MILEAGE OF ROADS AND SIDEWALKS

Including all construction for 1939, and dedicated streets in plats, this table gives the mileage of roads in King County, after deducting highways taken over by the state.

CLASSIFICATION	Road District No. 2	Road District No. 3	Total King Co. Mileage	State Primary Roads	State Secondary Roads	Total State Roads in King County	Total Mileage in King County
ROADS: Concrete	151.03	74.36	225.39	159.87	95.25	255.12	480.51
Brick	28.92	3.50	32.42	4.45	1.44	5.89	38.31
Heavy Bituminous	21.57	14.21	35.78	19.15	24.44	43.59	79.37
Light Bituminous—Stage 1	68.24	251.49	319.73	.....	.....	.....	319.73
Light Bituminous—Stage 2	81.09	37.20	118.29	.....	.....	.....	118.29
Light Bituminous—Stage 3	2.70	8.10	10.80	14.20	26.83	41.03	51.83
Gravel (1st & 2nd Class)	762.92	587.56	1,350.48	17.46	.....	17.46	1,367.94
Earth	181.29	6.12	187.41	.....	..	.....	187.41
Unimproved	327.37	274.22	601.59	.....	.....	.....	601.59
TOTAL ROADS	1,625.13	1,256.76	2,881.89	215.13	147.96	363.09	3,244 98

CLASSIFICATION	County Constructed			Privately Constructed			Total Mileage in King County
	Dist. 2	Dist. 3	Total	Dist. 2	Dist. 3	Total	
SIDEWALKS: Concrete	10.96	7.14	18.10	.40	14.50	14.90	33.00
Bituminous		1.95	1.95	.....	1.70	1.70	3.65
TOTAL SIDEWALKS	10.96	9.09	20.05	.40	16.20	16.60	36.65

TOTAL CONSTRUCTION IN 1939

(By Class of Projects—County Funds Only)

TYPE	DISTRICT No. 2		DISTRICT No. 3		BOTH DISTRICTS	
	Amount	% To Total	Amount	% To Total	Amount	% To Total
Contract Projects	$ 52,242.89	28.2	$142.216.38	58.4	$194,459.27	45.4
County Road Projects—No W. P. A.	62,333.35	33.7	26,546.14	10.9	88,879.49	20.7
County Road Projects—With W. P. A.	20,563.00	11.1	3,893.02	1.6	24,456.02	5.7
CA-600 Projects	49,906.61	27.0	70,891.00	29.1	120,797.61	28.2
TOTAL	$185,045.85	100%	$243,546.54	100%	$428,592.39	100%

TOTAL CONSTRUCTION IN 1939

(Including Comparison With 1938)

This table is a recapitulation of all construction including contracts, day labor and other district jobs, and increase in cost of 1938 construction. A comparison with 1938 shows a reduction in expenditures for the year just passed, due in part to the reduced activities of the W. P. A. in road building.

NATURE OF WORK	SOUTH DISTRICT NO. 2			NORTH DISTRICT NO. 3			BOTH DISTRICTS		
	1938 Cost	1939 Mileage	1939 Cost	1938 Cost	1939 Mileage	1939 Cost	1938 Cost	1939 Mileage	1939 Cost
Paving, Concrete	$	.....	$	$	5.36	$ 142,216.38	$	5.36	$ 142 216.38
Heavy Bituminous	.....	.....	302.43	.....	.....	1,078.58	.....	.....	1,381.01
Light Bituminous, Stage 1	53,946.86	8.25	3.428.70	73,511.28	.....	12.20	79,515.19	54.68	52,664.07
Light Bituminous, Stage 2	53,879.64	27.28	31,050.27	25,633.55	27.40	21,613.80	127,458.14	8.25	3,440.90
Light Bituminous, Stage 3	2,501.98	.....	35.45	8,130.32	.....	.....	10,632.30	.....	*35.45
Grading and Graveling (New Construction)	151,427.95	6.37	63,981.30	130,541.13	4.52	11,991.17	281,969.08	10.89	75,972.47
Grading and Graveling (Existing Roads)	17,053.54	12.24	24,965.36	.....	18.10	12,054.14	17,053.54	30.34	37,019.50
Grading (Earth Roads)	117,282.64	.....	905.79	57,305.40	4.26	9,818.50	174,588.04	4.26	10,724.29
Raylig	.....	.....	.....	739.20	3.05	387.89	739.20	3.05	387.89
Road Reconstruction	484,953.98	6.36	37,095.84	663,456.25	12.81	21,544.19	1,148,410.23	19.17	58,640.03
Sidewalks, Concrete	79,532.48	1.90	16,895.01	38,000.07	3.10	8,415.88	117.532.55	5.00	25,310.89
Bituminous	.....	.....	.....	6,499.20	1.50	263.86	6,499.20	1.50	263.86
Other	117.36	.....	.....	.....	.....	.....	117.36	.....	.....
Bridges	33,935.09	.....	20,002.12	131,810.95	.....	2,318.58	165,746.04	.....	22,320.70
Drainage	27,845.66	.....	11,594.23	27,212.79	.....	21,491.49	55,058.45	.....	33,085.72
Construction (Buildings, etc.)	2,977.60	.....	35.891.81	16,579.88	.....	.....	19 557.48	.....	35.891.81
Traffic and Safety	5,060.01	.....	4,310.25	7,820.68	.....	7,282.00	12.880.69	.....	11,592.25
Guard Rail	2,246.31	.....	696.89	2,915.12	.....	1,552.79	5,161.43	.....	2,249.68
Engineering (Location & Construction)	18,410.17	.....	10,373.45	8,393.15	.....	6,429.87	26,803.32	.....	16,803.32
Miscellaneous	409.30	.....	9,634.35	3,954.63	.....	714.00	4,363.93	.....	10,348.35
TOTALS	$1,051,580.57	62.40	$ 271,092.35	$1,202,505.60	80.10	$ 269.185.32	$2,254,086.17	142.50	$ 540,277.67

*Decrease.

CONTRACT CONSTRUCTION

The first record of a contract in connection with King County roads was that which in 1859 was let by the United States to Philip Keach for the construction of the military road from Fort Steilacoom to Seattle at $93.00 per mile. The first one awarded by the county commissioners was in 1867, in connection with the Snoqualmie Pass Road, the lowest and best bidder being Daniel Brackett who proposed to build the entire project for $120.00 per mile.

Even without legislation for that specific purpose road construction was at various times given to private interests to perform, though always under the guidance of the supervisors, but by 1890 limits began to be placed on the amounts at which work could be done by county forces. In that year too, the commissioners were given the discretion to let by contract anything exceeding $100.00, which in 1893 was reduced to $50.00. Two years later the amount was again raised to $100.00, with the districts in 1897 limited to $50.00 on any one project by their own crews, except in emergencies. By 1901 such $50.00 jobs were again subject to the commissioners discretion, but they were directed to contract for those between $50.00 and $500.00. Two years later the dividing line was set at $150.00, below that the supervisors to have their men do the work and above it the commissioners to award contracts. The first great change came in 1911 when the limit for day labor was set at $2,500.00 on roads and $500.00 on bridges. In 1933 the amount for all road district projects was set at $10,000.00 reduced to $5,000.00 in 1935, and two years later raised to $7,500.00, which is at present in effect.

Beginning with the permanent highway law in 1911 definite rules and regulations concerning the conduct of contract projects were set down by law. Thereafter, with each legislature, details as to partial and final payments, extras and overruns, and certificate of completion of contract were amplified and made more precise, to the point that exists today.

As to contract projects for the year just passed, there has been only one, undoubtedly because most of the improvements resulting from the heavy W. P. A. road programs of 1937 and 1938 were of a minor nature, and equal to the resources of the district forces.

CONTRACTS LET IN 1939

C.R.P. No.	Name of Project	District No.	Nature of Work	Estimated Cost	Total
.....	No contracts let	2	.....	.....	.....
156	McLeod Lake-Lennox Creek Road..	3	Grade/Gravel	$ 24,534.86	$ 24,534.86

CONTRACTS COMPLETED IN 1939

C.R.P. No.	Name of Project	Nature of Work	Estimated Cost	Completed Cost	Federal Grant
	SOUTH DISTRICT NO. 2				
139	Foster Avenue Bridge.....	Bridge	$ 15,865.00	$ 16,351.08	$ .....
P.W.A. No. 1296	King County Airport Warehouse (including Plumbing, Heating, Electrical)	Construction	40,000.00	35,891.81	18,000.00
.....	TOTAL	.....	$ 55,865.00	$ 52,242.89	$ 18,000.00
	NORTH DISTRICT NO. 3				
45	15th Ave. N.E. (85-110 Sts.).....	Paving	$ 28,287.76	$ 29,495.33	$ 15,480.00
138	Holman Road—Unit 1.....	Widen/Pave	29,670.33	30,186.19	
138	Holman Road—Unit 2.....	Widen/Pave	55,359.20	64,673.26	52,816.00
138	Holman Road—Unit 3.....	Widen/Pave	17,290.46	17,861.60	
	TOTAL		$130,607.75	$142,216.38	$ 68,296.00
	BOTH DISTRICTS				
	South District No. 2.....		$ 55,865.00	$ 52,242.89	$ 18,000.00
	North District No. 3.....		130,607.75	142,216.38	68,296.00
	TOTAL		$186,472.75	$194,459.27	$ 86,296.00

DISTRICT CONSTRUCTION

Under the supervision of the road district engineers all construction projects, whether financed by the county or with W. P. A. participation, are built to conform to state and county standards. The limit reimbursable out of the county road fund on district construction jobs is $7,500.00, subject to state approval, but in cases of emergency $500.00 may be spent without such sanction. While many road improvements have exceeded that limitation, the money overspent has come from road district funds.

During the course of the year the district engineers have given the supervisors their utmost cooperation; they have made frequent inspections and field checks of all district construction projects; they have investigated and reported on petitions for roads, complaints and inquiries. Theirs has been the task of co-ordinating the activities of the road districts with the state highway department.

Under their guidance the following projects have been completed, some begun last year and even earlier:

C. R. P. PROJECTS COMPLETED

Project No.	Name of Project	Nature	Cost From County Funds	W.P.A. Contribution in Labor	Total Completed Cost
	SOUTH DISTRICT NO. 2				
SRP A48	McKibben Road	Grade/Gravel	$ 3,687.03	$ 4,000.00	$ 7,687.03
CRP 13	Roads—E. of O'Brien	Rd. Reconstr.	6,380.98	26,009.00	32,389.98
78	S. 156th St. (24th S.—St. Hiway No. 1)	Engineering	221.79	.....	221.79
79	S. 160th St. (24th S.—St. Hiway No. 1)	Engineering	23.25	.....	23.25
104	R. D. Wilson Road	Grade/Gravel	7,105.15	36,604.15	43,709.30
139	Foster Ave. Bridge	Engineering	2,640.31	.....	2,640.31
140	W. Roxbury St. (35-37 SW)	Grade/Gravel	1,457.15	.....	1,457.15
142	Arbor Hgts (Units Nos. 1-2)	Graveling	4,965.88	.....	4,965.88
143	Arbor Hgts (Units No. 3-4)	Graveling	6,785.81	.....	6,785.81
144	Arbor Hgts (Unit No. 5)	Graveling	3,196.85	.....	3,196.85
145	Des Moines-Zenith	Conc. Sidewalks	3,389.84	*6,385.45	9,775.29
146	Calhoun Gravel Pit	Drainage	520.36	.....	520.36
147	Park Blvd.—Woodmont Beach	Drainage	4,337.37	.....	4,337.37
148	Bridge No. 3180	Engineering	31.33	.....	31.33
151	84th Ave. So.—Bridge No. 3204—Fill	Grade/Gravel	4,942.91	.....	4,942.91
152	Calhoun Gravel Pit Ext.	Purchase	4,000.00	.....	4,000.00
157	Bridge No. 3070—Replace	Bridge	2,133.99	.....	2,133.99
172	Cove Road et al.	Lt. Bit. No. 2	11,990.60	.....	11,990.60
173	Ellisport-Portage Rd. et al.	Lt. Bit. No. 2	9,138.67	.....	9,138.62
176	Highland Gravel Pit	Purchase	5,007.50	.....	5,007.50
CA-11	2nd Ave. So. (S. 124-126 St.)	Graveling	939.58	.....	939.58
			$ 82,896.35	$ 72,998.60	$155,894.95
	*Deduct State contribution	.....	.....	1,000.00	.....
	TOTALS	.....	$ 82,896.35	$ 71,998.60	$155,894.95

C. R. P. PROJECTS COMPLETED

(Continued)

Project No.	Name of Project	Nature	Cost From County Funds	W. P. A. Contribution In Labor	Total Completed Cost
	NORTH DISTRICT NO. 3				
CRP 138	Holman Road—Unit No. 1	Engineering	$ 1,360.40	$	$ 1,360.40
141	Tolt Hill Road	Rd. Reconstr.	1,065.03	15,199.20	16,264.23
149	Riviera Beach Road	Bulkhead	3,469.61	.....	3,469.61
158	W. Snoqualmie Road No. 283	Lt. Bit. No. 2	3,067.06	.....	3,067.06
159	Little Finn Road	Engineering	6.54	.....	6.54
160	Paananen Road	Lt. Bit. No. 2	1,862.81	.....	1,862.81
161	Parkway Drive	Lt. Bit. No. 2	1,812.04	.....	1,812.04
162	Sheffield Road	Lt. Bit. No. 2	2,547.54	.....	2,547.54
163	Tolt Hill Road No. 483	Lt. Bit. No. 2	2,646.82	.....	2,646.82
164	L. Briscoe Road	Lt. Bit. No. 2	1,097.48	.....	1,097.48
165	Clyde Road	Lt. Bit. No. 2	1,198.59	.....	1,198.59
166	Novelty Hill Road	Lt. Bit. No. 2	2,353.08	.....	2,353.08
169	F. D. Harmon Road	Grade /Gravel	2,342.05	.....	2,342.05
170	Madison Ave. (Lk Wash. Blvd.-State Road)	Lt. Bit. No 2	841.75	.....	841.75
174	W. 91st and W. 92nd Sts.	Grade /Gravel	1,940.37	.....	1,940.37
CA-13	E. 65th St. (35th N. E.-Ravenna Ave.)	Conc. Sidewks	1,107.41	2,322.50	3,429.91
CA-14	Ravenna Ave. (E. 68-77 Sts.)	Conc. Sidewks	1,000.40	2,365.75	3,366.15
CA-15	Carnation Road	Lt. Bit. No. 2	720.18	*350.00	1,070.18
			$ 30,439.16	$ 20,237.45	$ 50,676.61
	*Deduct resident's contribution		.....	350.00	.....
	TOTALS		$ 30,439.16	$ 19,887.45	$ 50,676.61
	BOTH DISTRICTS				
	South District No. 2		$ 82,896.35	$ 72,998.60	$155,894.95
	North District No. 3		30,439.16	20,237.45	50,676.61
			$113,335.51	$ 93,236.05	$206.571.56
	Deduct non-W. P. A. contributions		.....	1,350.00	.....
	TOTALS		$113,335.51	$ 91,886.05	$206,571.56

SIDEWALK PROJECT COMPLETED

CA-600 PROJECTS COMPLETED

(Projects up to $500.00 in Cost)

NATURE OF WORK	DISTRICT NO. 2		DISTRICT NO. 3		BOTH DISTRICTS	
	Mile.	Amount	Mile.	Amount	Mile.	Amount
Paving, Heavy Bituminous	Patch	$ 302.43	Patch	$ 1.078.58	Patch	$ 1,381.01
Lt. Bituminous Stage No. 1	8.25	3,428.70	Patch	12.20	8.25	3,440.90
Lt. Bituminous, Stage No. 2	10.48	9,921.00	5.05	3,466.45	15.53	13,387.45
Raylig	.....	.....	3.05	387.89	3.05	387.89
Grading & Graveling (New Const.)	2.40	6,184.91	3.52	7,708.75	5.92	13,893.66
Grading & Graveling (Existing Rds.)	7.26	5,656.21	18.10	11,434.99	25.36	17,091.20
Grading (Earth Roads)	.....	.....	4.26	6,616.25	4.26	6,616.25
Road Construction	2.73	3,512.28	11.81	3,977.43	14.54	7,489.71
Sidewalks, Concrete	*.50	493.22	*1.99	1,619.82	2.49	2.113.04
Bituminous	.....	.....	*1.50	263.86	1.50	263.86
Bridges	.....	580.60	.....	2,318.58	.....	2,899.18
Drainage	.....	6,736.50	.....	16,034.08	.....	22,770.58
Traffic and Safety	.....	4,310.25	.....	7,282.00	.....	11,592.25
Guard Rail	.....	696.89	.....	1,552.79	.....	2,249.68
Engineering (Location and Const.)	.....	7,456.77	.....	6,423.33	.....	13,880.10
Miscellaneous	.....	626.85	.....	714.00	.....	1,340.85
TOTALS	31.62	$ 49,906.61	49.28	$ 70,891.00	80.90	$120,797.61

*W P. A. Labor not included.

INCREASES IN COST—1938 PROJECTS

Caused principally by additional work required by the State Highway Department.

NATURE OF WORK	DISTRICT NO. 2		DISTRICT NO. 3		BOTH DISTRICTS	
	No. of Proj.	Amount	No. of Proj.	Amount	No. of Proj.	Amount
Paving, Lt. Bituminous, Stage 3	1	$ *35.45	.....	$	1	$ *35.45
Grading and Graveling (Existing Roads)	1	4,360.61	2	619.15	3	4,979.76
Grading (Earth Roads)	3	905.79	2	3.202.25	5	4,108.04
Road Reconstruction	6	1,193.58	7	1,302.73	13	2,496.31
Bridges	1	936.45	.....	.....	1	936.45
Drainage	.....	.....	2	1,987.80	2	1,987.80
TOTALS	12	$ 7,360.98	13	$ 7,111.93	25	$ 14,472.91

*Decrease

ENGINEERING COSTS

(Percentage to Total Cost of Construction)

TYPE OF ENGINEERING	Contracts	C. R. P. Projects			A-600 Projects		
	Both Dists.	Dist. 2	Dist. 3	Average	Dist. 2	Dist. 3	Average
Location	....	4.6	7.4	6.0	16.8	9.7	13.2
Construction	1.7	1.2	1.4	1.3	....	....	....
Office	0.6	1.2	4.0	2.6	3.0	1.2	2.1
TOTALS	2.3	7.0	12.8	9.9	19.8	10.9	15.3

CONSTRUCTION UNDER WAY IN 1939

Includes all jobs begun in 1939 but unfinished at the end of the year. The values given are the estimates made at the time the projects were set up.

NATURE OF WORK	County Funds Dist. No. 2	County Funds Dist. No. 3	Contribution W. P. A. Both Districts	TOTAL
Grading and Graveling	$ 20,961.67	$ 30,951.36	$ 34,049.40	$ 85,962.43
Road Reconstruction	13,361.00	.....	34,185.00	47,546.00
Sidewalks	14,605.17	1,098.00	25,146.54	40,849.71
Bridges	2,341.20	.....	.....	2,341.20
TOTALS	$ 51,269.04	$ 32,049.36	$ 93,380.94	$176,699.34

CONSTRUCTION PROPOSED FOR 1940

It is estimated that about $300,000.00 will be used for construction purposes in 1940. Projects already set up in the two districts total some $118,000.00 which does not include many CA-600 units for which no plans are necessary. Of the balance to be utilized for construction, though no estimates have as yet been made, most of it will go towards giving about 270 miles of roadway a bituminous stabilizing treatment, with roughly 70 miles to receive the final seal coat.

NATURE OF WORK	County Funds Dist. No. 2	County Funds Dist. No. 3	W. P. A. Contribution Both Districts	TOTAL
Concrete Paving	$ 10.200.00	$ 5,402.50	$	$ 15,602.50
Grading and Gravelling	28,931.04	51,151.50	180,865.28	260,947.82
Sidewalks	4,715.00	.....	9,696.55	14,411.55
Bridges	9,546.03	7,519.00	.....	17,065.03
TOTALS	$ 53,392.07	$ 68,073.00	$190,561.83	$308,026.90

TESTING LABORATORY

The King County testing laboratory located at 1027 Fairview Avenue was discontinued in April 1939, the lease on this building having expired and the owners desiring to use the property for other purposes. Under these conditions it was necessary for the county engineer's office to make other arrangements to take care of the testing of materials for use on construction projects in the county. No other building being available for lease, it was agreed that such tests as might be necessary would be made in conjunction with the city engineer's testing laboratory in the County City Building. Both laboratories were consolidated under the name of the County City Laboratory. All future tests for construction work in the county will be made here, and this consolidation will save the county about $500.00 yearly.

HOLMAN ROAD WIDENING AND PAVING

This project extending from West 87th Street and 15th Avenue Northwest, to a connection with the Seattle-Everett highway at Aurora Avenue, was made necessary due to the heavy traffic utilizing this thoroughfare and the anticipated increase in travel after completion of the new Ballard Bridge by the City of Seattle.

The work was divided into three units:

Unit No. 1—From West 87th Street and 15th Avenue Northeast to Greenwood Avenue and 105th Street;

Unit No. 2—Greenwood Avenue from 105th to 145th Street;

Unit No. 3—From 145th Street and Greenwood Avenue to connection with Seattle-Everett highway at Aurora Avenue.

Bids were accordingly called for each of the three units enumerated, and in each instance Fiorito Brothers, Inc., were the lowest bidders, receiving the award of the contract as follows:

Unit No. 1—on October 10, 1938	$ 29,670.33
Unit No. 2—on December 27, 1938	55,359.20
Unit No. 3—on December 27, 1938	17,290.46
Total Contract	$102,319.99

Unit No. 1 was completed during the early part of 1939 at a cost of $30,186.19. Work on Units No. 2 and 3 was delayed three months on account of a dispute over wages and hours between the contractor and the labor unions involved. At last begun during the first part of April, they were completed in June 1939, costing respectively $64,673.26 and $17,861.60.

The original concrete pavement was twenty feet wide, which was increased ten feet on either side making it forty feet in width. At one point on Greenwood Avenue there was a swing from the center of the right of way to the west making it necessary to lay the entire twenty feet of new paving on the east side of the highway.

Between 125th and 132nd Streets the installation of a drainage system was essential to carry surface water to low ground to the north of 132nd Street, 1,400 feet of 12" and 920 feet of 8" concrete pipe being used in this operation.

It was also found that due to the uneven surface of the existing pavement, it was deemed advisable to cover it to the height of the new concrete with a plant-mix bituminous coating.

Materials used were 12,000 barrels of cement, 1,827 tons of asphalt, Class D, 2,500 linear feet of culvert pipe and 21 tons of reinforcing steel and dowel bars.

With the completion of the new Ballard Bridge in May 1940, this four-lane thoroughfare will be a connecting link in a through passage between the city center and the Seattle-Everett Highway.

HOLMAN ROAD WIDENING AND PAVING

UNIT NO. 2
Completed Project
Showing Half Concrete
and Half Bituminous
Surfacing

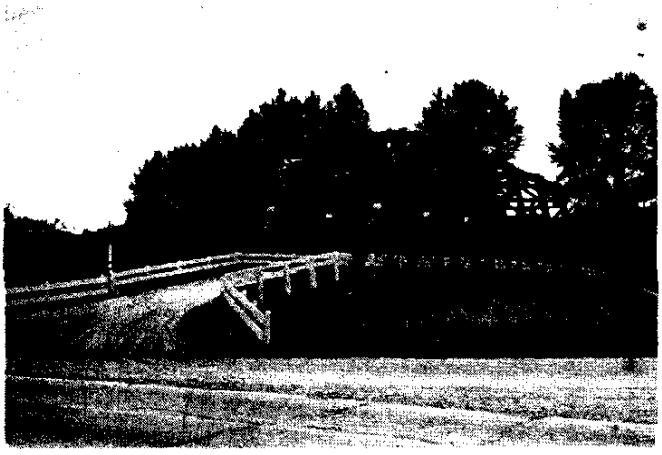
UNIT NOS. 2 and 3
Paving Operations

UNIT NO. 3
Spreading Bituminous
Mixture with Power
Spreader

FOSTER AVENUE BRIDGE

To replace an existing foot bridge over the Duwamish River seven miles from its mouth, on Foster Avenue at Tukwila, a contract was awarded to the Manson Construction Company on December 8, 1938 for $15,865.00. The original structure was built by the same firm in 1923, its main span being a 176-foot Howe truss and the total length including approaches 240 feet. In the spring of 1933 the existing bridge became seriously weakened by flood conditions, which caused it to sag badly. Temporary repairs were made but it was finally decided to replace it with a two-lane prefabricated creosoted wood truss. Actual construction was begun on March 6, 1939 after all danger of spring floods had passed. The pile driver was assembled on the job and consisted of a 4,000-lb. hammer and 50 H. P. engine, and 55-foot leads. After all the piling was driven the leads were removed and the A-frame used as a derrick to erect the trusses on the falsework. Since all the truss timber was prefabricated and creosoted, assembly was completed in a minimum of time. In addition to small tools the only other piece of equipment used was a Ford truck with a crab. The contract included these major items: 3,680 L. F. of creosoted piling, 75.0 M. B. M. creosoted lumber, 50.0 M. B. M. untreated lumber, 8,000 lbs. cast iron, and 20,000 lbs. structural steel, the total cost of construction being $16,351.08. The main span is 162 feet 5½ inches long consisting of a subdivided Howe truss 27 feet 10 inches high and seven panels of 23 feet 2½ inches each. All hardware was galvanized to eliminate painting maintenance. This is the first structure built by King County using split rings for chord splices and at some joints. Minimum clearance is four feet above extreme high water, as set by the U. S. Engineer's Office.

New Bridge Under Construction. Old Foot Bridge in Lower Right Corner

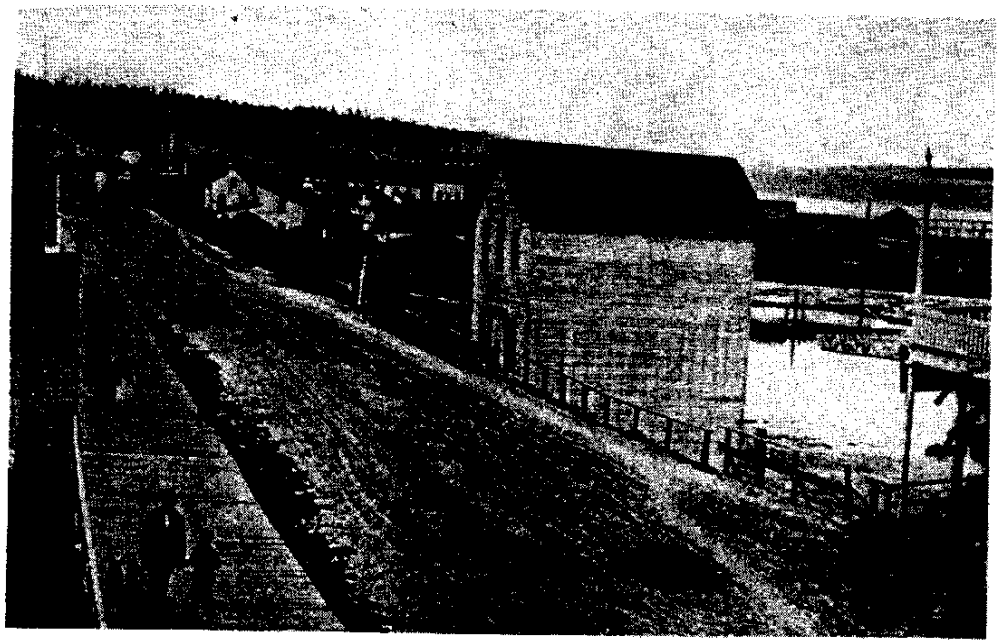


Completed Structure

KING COUNTY SIDEWALKS

The first sidewalks were built of planks, and it was years before even this simple type of construction was utilized in Seattle. By 1875 they had been laid in the area west of Eighth Avenue and south of Pine Street, and from First Avenue and Pike Street to Belltown. Four years later the first sidewalk was built in King County, on what is now Fairview Avenue North from Eighth Avenue and Pike Street to Lake Union.

Generally the residents or real estate operators provided themselves with sidewalks, first obtaining the permission of the commissioners, the earliest instance being a petition of Talmadge and Russell in 1889 to place walks on the streets in Gilman Park Addition. Sometimes the county assisted by furnishing the materials, the residents doing the work, as in the case of a petition in 1900 for plank sidewalks for South Seattle. This was followed by similar requests for many localities, including Mercer Island, until by 1937 about twelve miles were built privately, scattered throughout the county, widths ranging from three to four feet, constructed of planks, asphalt and the majority of concrete four inches thick.



PLANK SIDEWALK ABOUT 1876
First Avenue Looking South from Madison Street

In the 1890's when the bicycle was universally used for pleasure as well as for transportation, it was realized that some safeguards should be provided against the hazards of travel over the road system. The legislature therefore, in 1897 authorized county commissioners to consider applications reserving part of a public highway not less than four feet wide for cycles and pedestrians, and the first record of the granting of such a petition was for a bicycle path in Road District No. 60. The fears of the early legislators have certainly been borne out, especially in these times, with the revival of the use of the bicycle by the youth of today. Traffic deaths of pedestrians and cyclists have been on the increase, so that King County determined on an aggressive program of sidewalk construction.

Since counties could not use gas tax or road district funds for this purpose, and residents were not any longer able to bear the burden for economic reasons, pressure on the legislature resulted in permission being granted counties to build sidewalks.

During 1938 a good start was made, a total of approximately thirteen miles being built, with the W. P. A. supplying the labor, and the county the materials, equipment, engineering and supervision. Completed in the year just ended was an additional five miles, with about six miles more under way in both road districts, which will be finished in 1940.

With W. P. A. participation at a minimum in 1939, the state and the residents benefitted, joined with the Works Progress Administration in sharing the cost with the county.

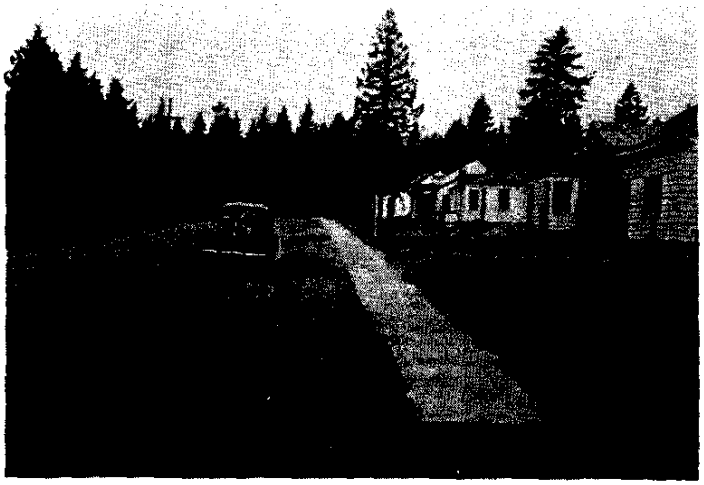
All have been constructed according to King County standards, calling for a walk four feet wide, three and one-half inches thick, one-course concrete of 1:3:5 mix. For approach entrances to driveways the section deepens to six inches. Usually the inside of the sidewalk is placed two feet from the property line, only on one side of the county right-of-way, and a modified turnpike section is generally adopted, calling for a shallow drainage ditch between the roadway pavement and the sidewalk.

DES MOINES-ZENITH
Preparing Subgrade

PUYALLUP STREET
Completed Project

KING COUNTY SIDEWALKS

4th AVE., N. W., AT
W. 132nd ST.,
Ready for Concrete



4th AVE., N. W., AT
W. 132nd ST.
Completed Project

30th AVE., N. E. AT
E. 67th ST.,
Curb Form in Place

MINE-TO-MARKET ROADS

The excitement of a gold rush was nothing new to Seattle, for in 1858 the discoveries on the Fraser River caused the growth of the town as outfitting headquarters. There were similar movements to Idaho in the next ten years, and by the time the 1890's arrived the city was prepared to meet the demands of the Klondike gold fever, from which time on Seattle's lead was definitely established.

Prior to that, eastern capital had invested in King County to explore its mineral resources and millions of dollars were spent in a few years. This activity practically ceased when the more attractive fields in Alaska claimed attention, and since then the development of the properties established by these easterners has been arrested. The county, however, cooperated with the early mining interests, for in 1896 the first construction was completed on the Miller River Road. To encourage the development of transportation facilities, legislation was passed in 1899, giving to mining districts the power to build roads to mining claims, on action by the majority vote of property holders therein. To facilitate construction it was provided that claim-holders might labor on such roads in discharge of assessment work required of them.

The importance of opening up these mining areas was recognized by the legislature which in 1939 created the mine-to-market road commission, consisting of the director of the Department of Conservation and Development as chairman, the state highway director and the executive officer of the Washington State Planning Commissioner. It gave this road commission authority to establish, locate and build roads to existing or potential mineral developments, on petition of five or more interested citizens. Construction was to be under the state highway director, when funds were made available, the county matching the state contribution, and maintaining such roads after completion.

MILLER RIVER ROAD

As stated above the first construction that took place on this road was in 1896, and it appears that more work was done in 1907, the county and the mining interests at that time sharing the expense. Since then and until 1935 not much seems to have been accomplished, but in that year a project was set up for the completion of about seven miles of road. Failure of the W. P. A. to secure sufficient man-power from the relief load in the district caused the proposed improvement to be dropped, and it was not until two years later that the county proceeded from its own funds to expend approximately $5,000.00 for bulldozing, ditching, and spot gravelling. In 1938 with the W. P. A. ready to help, an additional $5,600.00 was disbursed by the county, the W. P. A. furnishing approximately $24,000.00 in labor costs. Up to the end of 1939 a further $2,500.00 was spent, with more outlays obligated for 1940. Thus a total of county funds amounting to $13,100.00 has been put into this improvement, which is now sufficiently advanced to serve the needs of the area.

MONEY CREEK ROAD

The first expenditures made in this area were incurred by Road District No. 84 in 1903, amounting to $500.00, and the next year a petition was submitted to the county commissioners for a proper road to this district. As with the Miller River Road nothing further was done, but in 1935 a project was set up in connection with the W. P. A. for the constuction of 6.4 miles of road, but the relief load being light nothing was accomplished. Nevertheless, approximately $1,000.00 was spent for surveys in 1938 and the next year a project was set up under legislation passed in 1939 to be expended from 1940 funds, the county being obligated to the sum of $12,500.00 with the state matching this amount, making the total cost $25,000.00. Thus county expenditures will amount to $13,500.00, which will be increased by another

$17,500.00 during the coming year with the state matching this sum as well. It is hoped that with this additional money the road will be in excellent shape to serve that district.

LENNOX CREEK ROAD

This road, known as the McLeod Lake-Lennox Creek Road, entailed an expenditure of about $10,500.00 in 1938 with a total of $20,500.00 expended to the end of this year, and more to come in 1940. The 1939 construction was done under contract awarded to Muller and Gregory on July 1st, 1939 for a stretch of 10.06 miles to cost $21,124.27, to which was added another $3,410.59 for 2.8 miles additional along the Fuller Trail, due to a court order resulting from the county's inability to come to a proper understanding with the Weyerhaeuser Timber Company who controlled the old railroad right of way. Work began shortly after the award of the contract and by the end of the year $20,251.75 was paid to the contractor, which on the basis of the contract figures should have brought the project to about 90 per cent completion. However, due to the inclement weather prevailing at the time the drainage situation was difficult to overcome and was the cause of serious delays and increased expenditures. The contractor will probably have to make every effort to finish the project early in the coming year up to the river crossing, shortening the job by five miles, which the county will complete later on.

The county's experience with these three projects has shown conclusively that the construction of mine-to-market roads is very costly, principally on account of the difficult terrain and the unforeseen contingencies that arise due to this condition. The State Highway Department in its operations in the various counties has found this situation to be similar. Another factor that increases the cost is the isolation of the scene of operations, which necessitates transporting machinery, equipment and men great distances.

LENNOX CREEK ROAD—
C. R. P. 156
Before Construction

LENNOX CREEK ROAD—
C. R. P. 156
Completed Project

ROAD SURFACING PROGRAM

Our 1937 report explained the beginning of a program designed to build up the graveled roads in King County with a light bituminous surface treatment. There were two reasons for this step: first, in the interest of economy to produce a system of hard surfaced roads which would reduce annual maintenance costs, and second, to give relief from choking dust during the summer months.

For the comfort of communities along King County's roads, the latter reason seems most important. To understand why the dust problem exists it must be explained that the building of the road system for the past thirty years saw the use of pit-run material of fine gravel taken from county owned and operated gravel pits at a very low cost. Being fairly heavy in clay, the increase of traffic at high speed, gradually pulverized this surface into a fine dust, creating an unbearable situation to property owners, the traveling public, and ranchers along the road. Not only is this dust troublesome, but it is actually dangerous, because clouds obscure the vision of automobilists and are the direct cause of many fatal accidents.

The bituminous surface treatment is given in three stages, and even before the final seal coat is applied, the economy of this program becomes evident in the reduced cost of maintenance from year to year, by a reduction in the total mileage of graveled roads. The three-stage operation, briefly described, gives these results:

The first stage usually consists of blading the existing surface to a uniform road section by means of a heavy road grader equipped with scarifier when necessary. All loose surface materials are then bladed into windrows along each edge of the road and the surface swept free of dust and dirt. A pressure distributor then is employed to apply a shot of SC No. 2 at the approximate rate of 0.5 gallons per square yard. Immediately following this, the material in the windrows is bladed over the freshly treated surface and broomed until sufficiently set against raveling under traffic. The surface is then further compacted by means of a modern power roller.

Continuing on with the second treatment, the operation consists in patching and leveling the first course, placing a light shot of MC No. 2 oil, about 0.25 gallons per square yard for a tack coat. At the rate of about 100 cubic yards to each mile of twenty foot road, a layer of ¾ inch minus crushed rock aggregate is spread over the roadway surface. During this stage traffic is not excluded from the highway, and after a minimum of five days, during which period rubber tired patrol graders keep the surface evenly covered, a second course of oil and rock aggregate is spread in the same manner as for the first layer.

The final treatment consists in patching and leveling the roadbed, and brooming the surface until clean; then a pressure distributor is employed to apply the seal coat, using RC No. 4 at the rate of 0.30 gallons per square yard. This application is then covered with coarse screenings ½ inch to ¼ inch at the rate of about 150 cubic yards to the mile. The surface is then compacted to a uniform section with a ten ton roller, remaining voids being filled with a spread of fine screenings ¼ inch to No. 10, at the rate of 50 cubic yards to the mile. The last application of the fine screenings has the advantage of producing a dense mat, giving a smoother, non-skid riding surface, impervious to moisture—a distinct benefit in this county.

MILEAGE AND COST PER MILE

Up to the end of 1938 a total of 588.33 miles received the bituminous surface treatment, 239.91 in District No. 2 and 348.42 in District No. 3. During 1939 the following mileage was completed, some of it as maintenance projects.

TYPE	District No. 2	District No. 3	Total
Stage 1—S. C. 1	52.90	.....	52.90
S. C. 1A	11.17	49.07	60.24
Stage 2—M. C. 2	27.28	27.40	54.68
TOTALS	91.35	76.47	167.82

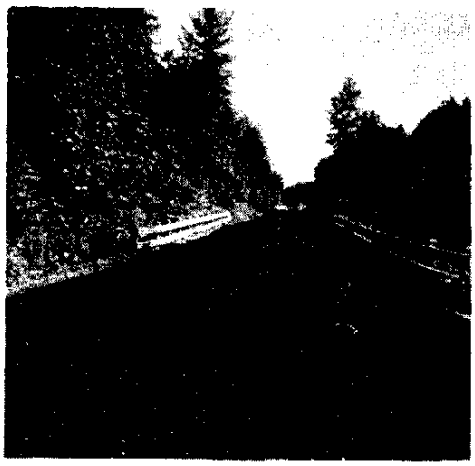
For 1940 approximately 270 miles of road will receive a bituminous stabilizing treatment, most of it by the penetration method, and a small portion of the road mix type. In addition about 70 miles will receive the final seal coat.

Taking all jobs completed in both districts since 1937, whether by contract or by district forces, or as a construction or maintenance item, these averages have been ascertained:

Type	Cost per Mile
S. C. No. 1	$405.00
S. C. No. 1A	252.00
S. C. No. 2	348.00
M. C. No. 2	869.00
R. C. No. 4	989.00
Raylig	349.00

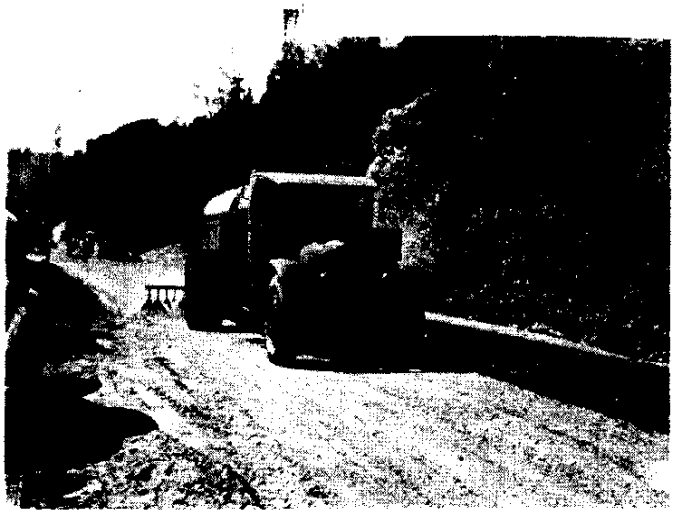
It is to be noted that S. C. No. 1 which should cost the least to apply exceeds the S. C. 1A and S. C. 2 applications, undoubtedly due to the fact that the first named product is usually applied by the district crews as a maintenance proposition rather than as construction. As to the M. C. No. 2, the average cost has been brought up to $869.00, because of the fact that most district jobs for this stage of the treatment included a preliminary application of raylig.

FIRST STAGE—SC-2
Completed Project



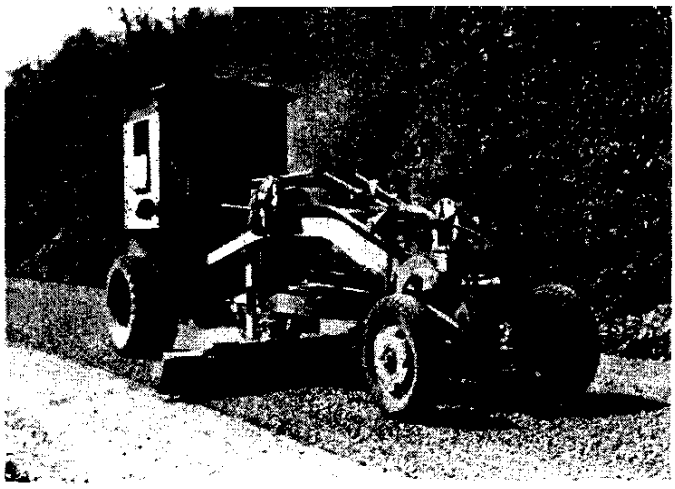
ROAD MIX TYPE
Completed Project

ROAD SURFACING PROGRAM



SECOND STAGE—MC-2
Distributing Oil

SECOND STAGE—MC-2
Spreading Rock on
Fresh Oil



SECOND STAGE—MC-2
Completing Project by
Brushing to Even Surface

MAINTENANCE

Maintenance of roads, bridges, etc. (as well as construction under $7,500.00 in cost) is in charge of District Supervisors George Swain in District No. 2 and A. J. Turnbull in District No. 3, with District Engineers Gillis and Matteson cooperating.

Total maintenance costs for 1939, as shown in the following tables, were $688,-608.85. The accounting figures of $699,193.23 are higher because their records include jobs carried over from 1938 and 1939 projects not yet completed. Also in disagreement is the total of the auditor's office of $700,459.54 because of a necessary lapse of time between the two offices.

Based on the auditor's figures, which record the actual warrants drawn for the year 1939 against maintenance account, 53 per cent of the county road fund has been used for this purpose, which is still 5 per cent under the average for the past ten years.

C. R. P. PROJECTS COMPLETED

Number	NAME OF PROJECT	Nature	District No. 2	District No. 3
SM 4	Peck Bridge No. 3121	Engineering	$ 32.00	$ .....
8	Auburn-Maple Valley Road	Engineering	17.50	.....
35	Sheffield St.—Kirkland	Graveling	.....	693.95
CSM21	Bridge No. 3147—Repairs	Bridge	4,503.01	.....
23	Snoqualmie Bridge No. 1834-A	Bridge	.....	4,003.16
24	W. S. Young Road et al	Raylig	4,953 04	.....
25	Slusser Rd. et al	Lt. Bit. No. 1	1,988.14	.....
26	C. E. Kinney Rd. et al	Lt. Bit No. 1	6,777.30	.....
27	W. River Rd. et al	Lt. Bit. No. 1	6,561.91	.....
CASM 7	E. Hollywood Road	Lt. Bit. No. 1	.....	854.15
8	Hobert-Landsburg Road	Lt. Bit. No. 1	.....	858.76
9	W. River Road	Lt. Bit. No. 1	.....	451.59
10	Green River Gorge—Kummer Cutoff	Lt. Bit. No. 1	987.96	.....
	TOTAL		$25,820.86	$ 6,861.61
	BOTH DISTRICTS		$32,682.47	

CASM-500 PROJECTS COMPLETED

(Projects up to $500.00 in Cost)

NATURE OF WORK	DISTRICT NO.2		DISTRICT NO 3		BOTH DISTRCTS	
	Mileage	Amount	Mileage	Amount	Mileage	Amount
Light Bituminous Stage 1	16.22	$ 11,730.86	37.37	$ 9,420.45	53.59	$ 21,151.31
Light Bituminous, Stage 2	.....	.....	.....	115.02	.....	115.02
Raylig	61.50	23,049.80	8.73	1,954.40	20.23	25,004.26
Road Repairs	2.56	3,941.24	.....	.....	2.56	3,941.24
Regraveling	26.66	13,342.75	18.89	10,167.56	45.55	23,510.31
Bridges	.....	3,475.55	.....	1,914.51	.....	1,914.51
Drainage	.....	1,120.51	.....	543.76	.....	1,664.27
Traffic and Safety	.....	.....	.....	1,914.51	.....	1,914.51
Guard Rail	.....	295.10	.....	1,728.09	.....	2,023.19
Miscellaneous	.....	534.78	.....	75.60	.....	610.38
TOTALS	106.94	$ 57,490.59	64.99	$ 35,347.41	171.93	$ 92,838.00

REGULAR MAINTENANCE—COST PER MILE

Representing district expenditures in the daily course of maintaining all roads and bridges, figures are also given to show the average cost per mile for such maintenance.

Type of Roads	District No. 2	District No. 3	Both Districts	Cost per Mile
Concrete	$ 9,385.60	$ 14,178.14	$ 23,563.74	$106.00
Brick	$ 9,385.60	$ 14,178.14	$ 23,563.74	101.00
Heavy Bituminous	10,659.07	3,978.35	14,637.42	173.00
Light Bituminous	41,042.49	67,799.98	108,842.47	222.00
Gravel (1st and 2nd Class)	227,783.35	146,484.19	374,267.54	290.00
Earth	2,501.01	253.63	2,754.64	.....
Bridges	17,624.75	18,016.93	35,641.68	.....
TOTALS	$312,018.63	$251,069.75	$563,088.38	Av. $235.00

TOTAL MAINTENANCE IN 1939

(Including Comparison With 1938)

Here are listed all expenditures for maintenance, including day labor and other district jobs, as well as the regular daily maintenance work. Figures are recorded for general classifications; hence light bituminous roads are grouped under one heading, including all three stages of treatment.

NATURE OF WORK	SOUTH DISTRICT NO. 2			NORTH DISTRICT NO. 3			BOTH DISTRICTS		
	1938 Cos:	1939 Mile	1939 Cost	1938 Cost	1939 Mile	1939 Cost	1938 Cost	1939 Mile	1939 Cost
Concrete	$ 9,241.78	.....	$ 9,385.60	$ 12,686.77	.....	$ 14,178.14	$ 21,928.55	.....	$ 23,563.74
Brick	3,115.89	.....	3,022.36	.....	.....	358.53	3,115.89	.....	3,380.89
Heavy Bituminous	29,649.92	.....	10,659.07	23,756.90	.....	3,978.35	53,406.82	.....	14,637.42
Light Bituminous, Stage 1, 2, 3	2,239.99	58.92	69,088.66	6,512.31	45.97	79,499.95	8,752.30	104.89	148,588.61
Gravel (1st & 2nd Class)	177,467.76	.....	227,783.35	169,721.61	.....	146,484.19	347,189.37	.....	374,267.54
Earth	2,013.88	.....	2,501.01	404.31	.....	253.63	2,418.19	.....	2,754.64
Road Repairs	1,414.79	2.56	3,941.24	1,339.32	.....	.....	2,754.11	2.56	3,941.24
Regraveling	7,224.14	26.66	13,342.75	7,749.78	22.89	10,861.51	14,973.92	49.55	24,204.26
Raylig	22,799.32	75.33	28,002.84	594.15	8.73	1,954.46	23,393.47	84.06	29,957.30
Bridges	22,684.83	.....	25,603.31	22,156.26	.....	31,448.05	44,841.09	.....	57,051.36
Drainage	422.30	.....	1,120.51	35.47	.....	543.76	457.77	.....	1,664.27
Traffic & Safety	.....	.....	.....	.....	.....	1,914.51	.....	.....	1,914.51
Guard Rail	593.67	.....	295.10	489.02	.....	1,728.09	1,082.69	.....	2,023.19
Engineering	443.83	.....	49.50	.....	.....	.....	443.83	.....	49.50
Ferries and Wharves	465.91	.....	.....	7,792.11	.....	.....	8,258.02	.....	.....
Miscellaneous	232.55	.....	534.78	119.31	.....	75.60	351.86	.....	610.38
TOTALS	$280,010.56	163.47	$395,330.08	$253,357.32	77.50	$293,278.77	$533,367.88	241.06	$688,608.85

STATIONARY AND MOBILE EQUIPMENT

As of June 30th, 1939, the total value of mobile equipment fell to about 63 per cent of the 1938 inventory, while stationary equipment rose some 4 per cent. Of the road machinery, approximately 42 per cent is in good condition, 27 per cent fair, 23 per cent poor and 8 per cent ready to be junked. Generally the inventory is in about the same state as last year, the drop in value being roughly 2 per cent greater, and the equipment in good and fair condition being slightly under that of 1938.

INVENTORY OF STATIONARY EQUIPMENT

(Buildings Not Included)

LOCATION	DIST.	VALUES 1938	VALUES 1939
Gravel Pits—Bow Lake	2	$ 6,024.36	$ 4,171.19
Titus	2	5,072.00	3,387.00
Calhoun	2	6,785.00	5,204.74
Renton	2	2,595.00	2,523.98
Redondo	2	4,380.00	3,958.52
Krain	2	3,745.00	1,395.00
Fall City Quarry	3	.....	115.00
Sheds—Bothell	3	60.00	67.50
Hobart	3	60.00	57.00
Issaquah	3	.....	85.00
North Bend	3	.....	88.00
Tolt (includes Duvall)	3	60.00	136.00
Woodinville	3	.....	435.50
Bellevue	3	.....	404.50
Coalfield	3	.....	90.50
Fall City	3	.....	652.00
Bunkers—Cedar Falls (formerly Juanita)	3	7,920.00	6,950.00
Redmond	3	9,991.00	7,161.25
Woodinville	3	2,005.00	1,820.00
Bellevue	3	1,810.00	1,507.50
Coalfield	3	3,885.00	3,172.50
Tolt	3	2,670.00	2,122.50
Fall City	3	570.00	565.00
Issaquah	3	1,690.00	1,610.00
North Bend and Haller Lake (Dismantled)	3	2,880.00	.....
Yards—Kent	2	2,900.00	5,213.01
Redmond	3	4,393.00	2,477.00
Haller Lake	3	337.00	642.50
*Shops—Kent	2	3,280.00	7,006.56
Vashon Island	2	.....	593.62
Redmond	3	3,267.50	3,715.50
Haller Lake	3	1,433.00	941.00
Asphalt Plant—Titus	2	.....	7,500.00
Redmond	3	.....	2,770.00
Office—Kent	2	4,311.88	5,721.58
Redmond	3	3,546.34	4,368.89
TOTALS—South District No. 2		$ 39,093.24	$ 46,675.20
North District No. 3		45,577.84	41,954.64
BOTH DISTRICTS		$ 85,671.08	$ 88,629.84

*Blacksmith, machine, paint shops.

	PURCHASES 1938	PURCHASES 1939	DISPOSALS 1938	DISPOSALS 1939
South District No. 2	$ 2,895.88	$ 17,993.64	$ 18.00	$ 249.84
North District No. 3	2,806.34	1,275.54	35.00	.....
TOTAL BOTH DISTRICTS	$ 5,702.22	$ 19,269.18	$ 53.00	$ 249.84

INVENTORY OF MOBILE EQUIPMENT

For Fiscal Year Ending June 30, 1939

TYPE OF EQUIPMENT	SOUTH DISTRICT NO. 2 Condition of Equipment					SOUTH DISTRICT NO. 2 1939 Value	NORTH DISTRICT NO. 3 Condition of Equipment					NORTH DISTRICT NO. 3 1939 Values	BOTH DISTRICTS Condition of Equipment					BOTH DISTRICTS Values	
	Good	Fair	Poor	Junk	Total		Good	Fair	Poor	Junk	Total		Good	Fair	Poor	Junk	Total	1938	1939
Trucks	18	26	11	1	56	$ 26,962.87	25	19	24	2	70	$ 37,770.28	43	45	35	3	126	$104,695.14	$ 64,733.15
Trailers	3	1	2	....	6	1,472.00	9	....	....	....	9	4,507.54	12	1	2	....	15	8,753.00	5,979.54
Business Cars	8	2	5	....	15	3,515.00	3	....	....	....	3	1,522.00	11	2	5	....	18	8,352.11	5,037.00
Tractors	4	12	3	....	19	4,728.00	12	2	....	....	14	16,379.00	16	14	3	....	33	43,453.00	21,107.00
Power Graders	6	4	7	....	17	10,157.00	17	2	2	....	21	26,348.00	23	6	9	....	38	53,176.00	36,505.00
Power Mowers	3	2	....	....	5	106.00	2	3	....	....	5	2,137.00	5	5	....	....	10	165.95	2,243.00
Loaders	2	....	....	....	2	4,991.00	....	....	....	....	....	.....	2	....	....	....	2	2,196.00	4,991.00
Shovels	3	....	....	1	4	6,750.00	2	2	1	....	5	5,095.00	5	2	1	1	9	23,481.00	11,845.00
Rollers	1	1	....	....	2	480.00	1	....	....	....	1	75.00	2	1	....	....	3	1,185.00	555.00
Pull Graders	....	4	7	2	13	.....	2	1	4	5	12	1,678.00	2	5	11	7	25	3,375.00	1,678.00
Rippers	....	....	3	1	4	.....	....	....	....	....	....	.....	....	....	3	1	4	.....	.....
Pile Drivers	2	1	....	....	3	309.00	1	....	1	....	2	208.00	3	1	1	....	5	1,550.00	517.00
Pumps	3	....	....	....	3	99.00	1	1	....	....	2	133.00	4	1	....	....	5	717.00	232.00
Fresnos	....	....	....	8	8	.....	....	....	....	....	....	.....	....	....	....	8	8	.....	.....
Scrapers	2	....	....	3	5	300.00	....	....	....	....	....	.....	2	....	....	3	5	553.41	300.00
Land Levelers	....	....	....	....	....	.....	....	....	....	6	6	40.00	....	....	....	6	6	.....	40.00
Dragline Buckets	1	2	2	....	5	1,579.00	....	....	....	....	....	.....	1	2	2	....	5	1 815.00	1,579.00
Boats	....	....	....	....	....	.....	1	....	....	....	1	253.00	1	....	....	....	1	389.00	253.00
Air Compressors	....	....	....	....	....	.....	2	....	....	....	2	1,317.00	2	....	....	....	2	2,150.00	1,317.00
Misc. Equipment	1	1	1	....	3	1,783.37	....	....	....	....	....	.....	1	1	1	....	3	171.00	1,783.37
TOTALS	57	56	41	16	170	$ 63 232.24	78	30	32	13	153	$ 97,462.82	135	86	73	29	323	$256,177.61	$160,695.06
Purchases—1939						$ 11,100.95						$ 10,412.21						$ 53,323.89	$ 21,513.16
Disposals—1939						408.07						825.00						7,317.42	1,233.07

BRIDGE DEPARTMENT

Under the general supervision of Assistant County Road Engineer James H. Marshall, the work in connection with bridges is divided between Bridge Engineer Harry J. Woelber as to plans and supervision, and Dock & Wharf Engineer Frank King as to inspections. Though now and for many years a function of the county engineer's office, the administration of bridges in the early days was placed by legislation directly under the county commissioners.

In 1854 the law provided that bridge construction and repairs over $50.00 in value were to be undertaken by the county, private work evidently being permitted under that figure. For each project the county commissioners were to appoint a bridge commissioner, (to receive $3.00 daily), who was to estimate the cost, advertise for bids, let the contract, and supervise the work, which however could not begin until an appropriation not exceeding the estimate was first made. There was provision in the law for interested parties to aid in the construction of bridges by making subscriptions to the county.

The first appropriation of record was made in 1863 for $60.00 to build a bridge across the Black River by the Military Road leading to Seattle. Evidently nothing was accomplished, because it was not until 1867 that King County's first bridge was built across this stream, by the contractors Russell & Shorey. To superintend this project Erasmus M.Smithers was appointed bridge commissioner, being the first in King County to occupy this office. At about the same time Thomas Alvord was similarly designated for the White River Precinct, and was authorized the year following to negotiate the sale of bonds to finance the building of bridges in his territory. This illustrates the county's weakened financial condition, and shows why bridge construction was so long delayed. The first one across the White River was not erected until 1883, and then, too, undoubtedly from road funds, the use of which was by that time made available for bridges.

For in 1869 an act was passed permitting the utilization of road monies to build and repair bridges, under the direction of a bridge superintendent appointed by the county commissioners, thus abandoning the office of bridge commissioner. The superintendent was to let the contracts, supervise the work and certify completion to the county commissioners. From that time on, the erection of bridges proceeded rapidly, eventually resulting in the elimination of privately-operated ferries in King County.

In 1905 the county commissioners proceedings record the employment of a bridge inspector to examine and report on the condition of all such structures in the county, and this function together with the construction of bridges by contract gradually came under the supervision of the county engineer.

Today bridges, like roads, are governed by the highway code of 1937, projects under $7,500.00 in cost being performed by the road district supervisors, and inspection, engineering and contracts being under the county engineer.

BRIDGE EXPENDITURES—(1867 to 1939)

Up to 1901, taken from the county commissioners records, to 1923 from that source and the county auditor's reports, and to 1939 from the latter's figures, this statement of disbursements for bridges must not be considered as accurate, but merely as an indication of the amount of bridge construction, maintenance and repair that has been accomplished in King County since the beginning.

BRIDGE EXPENDITURES—(1867 to 1939)

(Continued)

Year	Amount	Year	Amount	Year	Amount
1867	$ 800.00	1892	$ 1,544.00	1917	$ 167,124.12
1868	1,500.00	1893	2,543.00	1918	27,028.55
1869	700.00	1894	1,091.00	1919	17,606.64
1870	2,060.00	1895	3,001.13	1920	167,336.18
1871	1,378.00	1896	1,439.05	1921	21,760.00
1872	990.00	1897	535.30	1922	118,927.39
1873	1,100.00	1898	193.70	1923	53,683.19
1874	1,260 00	1899	349.58	1924	108,614.93
1875	1,390.00	1900	554.22	1925	126,842.65
1876	1,666.00	1901	24,938.15	1926	65,612.99
1877	403.97	1902	30,949.38	1927	121,132.27
1878	3,209.44	1903	34,240.55	1928	15,742.75
1879	1,179.00	1904	18,341.94	1929	22,846.32
1880	884.74	1905	51,192.60	1930	34,542.32
1881	451.13	1906	112,712.69	1931	17,275.53
1882	687.44	1907	85,587.21	1932	11,037.33
1883	582.28	1908	53,814.95	1933	50,114.76
1884	4,178.50	1909	74,297.29	1934	40,174.83
1885	1,938.55	1910	40,380.00	1935	142,324.95
1886	696.00	1911	44,605.36	1936	34,320.29
1887	13,582.50	1912	51,975.69	1937	55,329.84
1888	6,464.03	1913	7,675.70	1938	210,587.13
1889	6,654.50	1914	41,428.42	1939	79,372.06
1890	2,975.76	1915	63,394.19	TOTAL	$2,531,877.17
1891	3,810.00	1916	15,213.21	Average	$ 34,683.25

DISTRIBUTION OF BRIDGES

The year 1939 was marked by a vigorous campaign in both the North and South Districts, to replace old wooden bridges with culverts or concrete structures. Its success is indicated by the decrease in the total number of bridges in King County in spite of new construction of wooden spans on newly graded roads.

District	Wood	Steel	Concrete	Suspension	Draw	Total
South District No. 2	134	12	23	0	1	170
North District No. 3	217	7	7	4	1	236
TOTALS	351	19	30	4	2	406

CONSTRUCTION

During 1939 work was begun and completed on a contract let in December 1938 for the erection of the Foster Avenue Bridge. This and district projects resulted in the following expenditures for construction:

Source	South District No. 2	North District No. 3	Both Districts
Contracts	$ 16,351.08	$	$ 16,351.08
C. R. P. Projects	2,133.99	.....	2,133.99
CA-600 Projects	580.60	2,318.58	2,899.18
Increases in 1938 Costs	936.45	.....	936.45
TOTAL	$ 20,002.12	$ 2.318.58	$ 22,320.70

MAINTENANCE

During 1939 district maintenance crews were particularly active in bettering the condition of the bridge system as a whole. This was due largely to a well-ordered plan to strengthen all points of structural weakness. The task of the North District was made especially difficult by the heavy traffic over the Mercer Island bridges incident to the construction of the Lake Washington Toll Bridge, which accelerated the rate of wear at least five times, making heavy maintenance expenditures necessary.

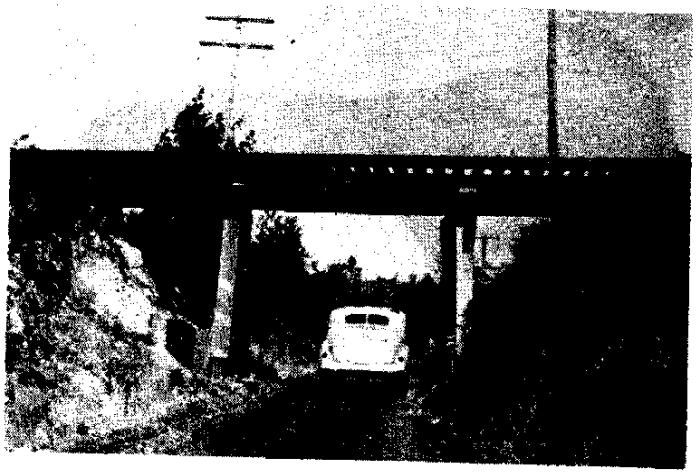
Source	South District No 2	North District No. 3	Both Districts
C. R. P. Projects	$ 4,503.01	$ 4,003.16	$ 8,506.17
CASM 500 Projects	3,475.55	9,427.96	12,903.51
Regular Maintenance	17,624.75	18,016.93	35,641.68
TOTAL	$ 25,603.31	$ 31,448.05	$ 57,051.36

CONDITION

Inspection of all structures was made at frequent intervals, and their condition classified:

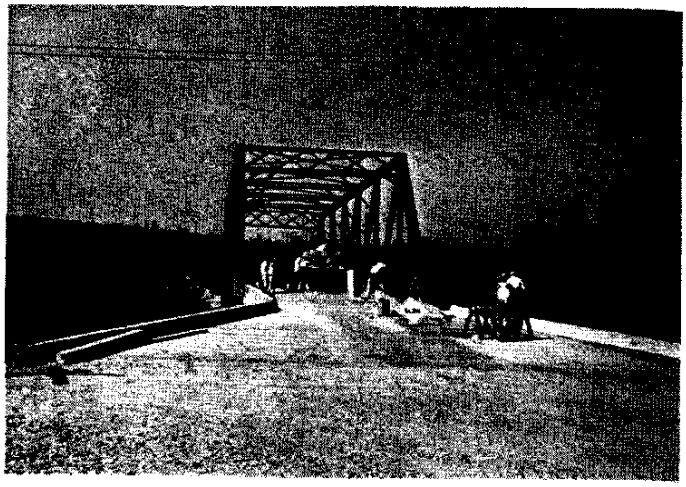
A—New wooden and permanent bridges in perfect condition.
B—First class condition in every respect.
C—Fair condition, needing minor repairs.
D—Poor condition, needing major repairs, but still safe.
E—Past the limit of safety and needing immediate repairs.

Condition	Reasonable Percentage	South District No. 2		North District No. 3		Both Districts	
		Percent	Number	Percent	Number	Percent	Number
A	20	14	24	5	11	9	35
B	50	47	80	53	125	50	205
C	20	27	45	32	77	30	122
D	8	11	19	9	21	10	40
E	2	1	2	1	2	1	4
TOTALS	100%	100%	170	100%	236	100%	406



ELIMINATION OF NARROW UNDERPASSES
Many Others Are Due For Widening During 1940

BRIDGE OPERATIONS



BRIDGE RECONSTRUCTION
Showing District Repair Crews at Work

BRIDGE REPLACEMENT
1. Bridge No. 3099 Original Condition

BRIDGE REPLACEMENT
2. Bridge No. 3099 Replaced with Concrete Wing Walls and Abutment.

WHARF DEPARTMENT

Under the general direction of Assistant County Road Engineer James H. Marshall, this department is in charge of Dock and Wharf Engineer Frank King who supervises all construction and maintenance. As a function of county government the care of wharves dates back to 1900 when the only public docks were those used by the ferries then owned and operated by the county. In fact the first wharf expenditures, between 1900 and 1919 inclusive, came out of the ferry budget, which in 1920 became the ferry, wharves and docks account to which were added the docks, dock sites and wharves budget, and the industrial tracts. During all this time payments were also made out of road and road and bridge funds. By 1922 disbursements were being made from the industrial tracts, dock sites and wharves budget, which, while it continued until 1929, gave way in 1924 to the present county wharves budget. Thus the department as today constituted may be said to date from 1924, since which time, (and perhaps earlier) it has been a function of the county engineer's office.

Prior to 1900, all docks were privately built and owned pursuant to legislation dating back to 1854 (reaffirmed in 1881 and 1893) giving county commissioners the power to authorize the private erection of wharves on property owned by the petitioner, or at the terminus of a public highway, with the right to regulate rates for all traffic excepting passengers and their baggage which were free. The first wharf thus constructed was Yesler's at the foot of Yesler Way, which however operated without proper authorization from 1853 to 1868, when the county commissioners duly recorded a permit to H. L. Yesler for a ten-year period. Thus the first wharf received the first legal blessing. Added to continually, by 1881 it supported a miniature town.

YESLER'S WHARF IN BACKGROUND—ABOUT 1885

with a street down the center lined by warehouses, stores and shops. The second dock was Plummer's at the foot of Main Street, then came Butler's at the foot of Madison Street, Dexter Horton's, Stone & Burnett's, Dr. Calhoun's at Belltown, etc. By 1876 there were eight wharves in Seattle, and by 1888 they lined the shores of Elliott Bay, all being exceptionally long structures required by the extreme of low and high tides. The owners considered their titles secure, so that when in 1890 the legislature created the State Harbor Line Commission to designate the exact line and areas of all harbors within the state, wharf owners took exception to the ruling of the commission that they were trespassers. Henry L. Yesler was the first to contest this action, but the United States Supreme Court rendered a decision favoring the harbor commission, since which time title to all wharves built on public domain have remained with the governmental authorities.

In 1899 an act was passed authorizing counties to construct condemn and purchase, or purchase, and to maintain wharves, with grounds, roads, approaches or landings and to operate them free or with tolls. Having already been authorized by law in 1895 to acquire and operate ferries in the same manner, it may be assumed that the need for ferry docks became evident when in 1899 King County planned an incursion into the field of water transportation. Under this legislation the first wharf acquired by the county as noted in the commissioners records was that built in 1894 by M. R. Hatch at Burton, which he agreed to transfer on condition that the county keep it in repair. This act did not immediately affect the private construction of docks, for in 1903 a permit was granted among others to W. T. Gaffner to build one at Harrison Avenue, West Seattle, in 1904 to W. L. Dudley at Hanson Avenue, Alki Point, in 1906 to the Alki Point Transportation Company, at Alki Avenue, Alki Point.

Nevertheless, the county soon began in earnest to acquire privately-owned wharves, and to erect others especially those to be used as ferry terminals. The first was at Vashon, then in 1900 Kirkland and Madison Street, Seattle, followed in 1902 by the Furth Dock on Lake Washington. Then a new one was built in 1903 at Stone's Landing (Stoneway), Des Moines in 1904; Mercer, Chautauqua, Portage, Juanita, and Houghton in 1905; Lisabuela, in 1906; Cove, Newport, Medina, and Kennydale in 1907; until today the county owns fifty-one wharves and twenty-two dock sites not yet improved with structures.

From the beginning, the county surveyor was instructed to draw the plans for all these improvements, though the operation of the wharves, at least until 1924, seems to have been a separate organization under the direction of the county commissioners. An analysis of county wharf expenditures and the budgets from which they were made will demonstrate effectively the changes which have occurred in wharf administration since 1900. Prior to that date there were scattered payments out of the road and road and bridge funds, mostly in the nature of assistance to wharf owners whose docks were at the terminus of a public highway, and not exceeding about $1,500.00 in all. In those days the county commissioners felt such expenditures to be a proper charge on road funds, and after a lapse of many years their correctness is borne out by Section 7, Chapter 187, of the Highway Code which provides that payment for construction, repair and maintenance of wharves necessary for vehicle ferriage and for other proper county road purposes must be made from the county road fund.

Disbursements listed on the opposite page include administration, capital, outlay (including dock sites), construction, repairs and maintenance.

EXPENDITURES—(1900-1939)

Year	BUDGET ACCOUNT		Total
1900	Ferries		$ 5,464.38
1901	Ferries	$ 806.50	1,068.84
	Road and Road & Bridge	262.34	
1902	Road and Road & Bridge		3,055.51
1903	Road and Road & Bridge		3,007.94
1904	Road and Road & Bridge		2,685.95
1905	Road and Road & Bridge		4,388.49
1906	Road and Road & Bridge		8,799.92
1907	Road and Road & Bridge		11,074.74
1908	Road and Road & Bridge		15,793.08
1909	Road and Road & Bridge		11,834.20
1910	Road and Road & Bridge		2,512.57
1911	Road and Road & Bridge		6,672.60
1912	Ferries	$ 6,281.86	9,184.71
	Road and Road & Bridge	2,902.85	
1913	Road and Road & Bridge		13,285.11
1914	Ferries	1,140.16	13,901.30
	Road and Bridge	12,761.14	
1915	Ferries	1,398.62	13,532.99
	Road and Bridge	12,134.57	
1916	Ferries	5,681.88	22,766.45
	Road and Bridge	17,084.57	
1917	Ferries	3,259.85	29,021.48
	Road and Bridge	25,761.63	
1918	Ferries	18,102.93	75,774.95
	Road and Bridge	57,672.02	
1919	Ferries	36,964.34	60,800.98
	Road and Bridge	8,836.64	
	Dock Sites	15,000.00	
1920	Ferry Wharves and Docks	41,999.34	76,774.74
	Docks ,Dock Sites and Wharves	24,336.90	
	Industrial Tracts	10,438.50	
1921	Ferry Wharves and Docks	95,166.87	121,205.34
	Industrial Tracts	26,038.47	
1922	Industrial Tracts, Dock Sites and Wharves		13,443.26
1923	Industrial Tracts, Dock Sites and Wharves		18,985.37
1924	County Wharves	7,871.34	12,949.63
	Industrial Tracts, Dock Sites & Wharves	5,078.29	
1925	County Wharves	11,563.59	16,782.13
	Industrial Tracts, Dock Sites & Wharves	5,218.54	
1926	County Wharves	8,619.66	14,941.96
	Industrial Tracts, Dock Sites & Wharves	6,322.30	
1927	County Wharves	20,682.49	26,602.16
	Industrial Tracts, Dock Sites & Wharves	5,919.67	
1928	County Wharves	11,403.87	17,305.73
	Industrial Tracts, Dock Sites & Wharves	5,901.86	
1929	County Wharves	18,917.19	35,473.89
	Industrial Tracts, Dock Sites & Wharves	16,556.70	
1930	County Wharves		5,121.84
1931	County Wharves		66,571.33
1932	County Wharves		11,896.12
1933	County Wharves		10,850.57
1934	County Wharves		10,232.86
1935	County Wharves		13,665.76
1936	County Wharves		50,701.13
1937	County Wharves		46,414.29
1938	County Wharves		38,782.75
1939	County Wharves		42,790.06
	TOTAL		$966,117.11
	Yearly Average		$ 24,152.93

EXPENDITURES BY SOURCE—(1900-1939)

Total expenditures from 1900 to 1939 classified by source are:

Year	Budget	Amount
1900-1918	Ferries	$ 79,100.32
1901-1919	Road and Road & Bridges	220,525.87
1919	Dock Sites	15.000.00
1919-1921	Ferry Wharves & Docks	137,166.21
1920	Docks, Dock Sites & Wharves	24,336.90
1920-1921	Industrial Tracts	36,476.97
1922-1929	Industrial Tracts, Dock Sites & Wharves	77,425.99
1924-1939	County Wharves	376,084.85
	TOTAL	$966,117.11

DETAILED EXPENDITURES—1939

Figures are given by accounting classifications, and by disbursement on wharves. The difference of $3,805.91 is made up of items not chargeable to any particular wharf, such as administrative, machinery, equipment, and tools, and miscellaneous overhead expense. In addition to expenditures from the wharf budget, engineering and other technical assistance caused an outlay of $505.97, from county engineer's funds.

By Accounting Classifications

Materials and Supplies	$ 18,853.48	
Labor	21,297.22	
Industrial Insurance & Medical Aid	241.95	
Wharf & Dock Insurance	154.34	
Transportation	347.15	
Motor Vehicle Operation & Maintenance	896.07	
Capital Outlay	999.85	
		$ 42,790.06

By Wharves

Wharf	Amount	Wharf	Amount
Burton	$ 558.64	Manzanita	$ 70.00
Colvos	5,704.77	Medina	990.57
Cove	106.98	Portage	10,866.33
Dockton	298.51	Proctor	877.61
Ellisport	245.36	Prospect Street	6,361.20
Fruitland	985.35	Roanoke	197.97
Harbor Heights	3,317.13	Rosehilla	126.60
Island Park	1,701.57	Sealth	435.27
Kirkland	1,389.05	Stoneway	99.84
Leschi	1,577.91	Tahlequah	411.51
Lisabuela	127.59	Vashon Heights	713.28
McGilvra	542.83		
Madison	1,278.28	TOTAL	$ 38,984.15

LOCATION

King County owns 51 wharves and 22 wharf-sites not in use at present, distributed as follows:

Districts	Location	Wharves	Sites (Not in Use)
City District No. 1	Lake Washington	2	....
	Lake Union	1	....
	Elliott Bay	1	....
	TOTAL	4	....
South District No. 2	Vashon Island	16	8
	Puget Sound	1	3
	Duwamish Waterway	1	1
	TOTAL	18	12
North District No. 3	Lake Washington	28	10
	Lake Union	1	....
	TOTAL	29	10
TOTAL ALL DISTRICTS		51	22

Of these wharves six are leased to ferry operators, four to industrial concerns and one to the United States Government, the balance being operated by the county. All but one are maintained by the county. The annual income from leases is approximately $6,000.00, all improvements made by the lessees reverting to the county at the expiration of the terms of the various leases.

CONSTRUCTION

The largest project in 1939 was the reconstruction of Portage Wharf situated on the east side of Vashon Island near the isthmus which connects Vashon with Maury Island. This is the most-used non-ferry wharf owned by the county. Its central location, shelter from storms at any season, and deep water make it the favored landing place of Sound freighters hauling hay, straw, and grain to the Island and carrying berries, fruit, cattle and poultry to market. In addition the Standard Oil Company has leased the right to unload tankers here, conveying the oil through pipes laid on the dock to their storage depot nearby. This wharf was completely rebuilt, extending into water deep enough for any steamer coming to Puget Sound, at a cost of $10,866.33.

Next in size was the rebuilding of Prospect Street wharf in Lake Union. This is an industrial dock, moorage being rented to fishing vessels and cannery tenders with storage space provided on shore. Due to the presence of a rubbery mud under this wharf extremely long piles were driven. The total expended here was $6,361.20.

Colvos Wharf, a berry shipping point on the west side of Vashon Island was rebuilt at a cost of $5,704.77. This is also a regular landing point for a passenger steamer.

Harbor Heights Wharf on Quartermaster Harbor was replaced at a cost of $3,317.12. This is a passenger boat landing at a point inaccessible by road, the original structure having been built and paid for by the residents of the vicinity although it was on a county right-of-way.

Nineteen other wharves were rebuilt or repaired ranging in expense down to an item of $70.00 spent at Manzanita for a shelter for passengers waiting for the boat.

KING COUNTY FERRIES

While not properly a function of the county engineer's office, the operation and maintenance of ferries has been considered from the earliest days as being related to the county road system. For in 1869 legislation was passed, entitled "An act in relation to roads, ferries, bridges, and travel on public highways." Chapter II of this law is concerned with the establishment and regulation of ferries, which would lead to the assumption that this means of transportation, like bridges, was then thought of in connection with highways. More recently, the highway code of 1937 provided in Section 7, Chapter 187 that expenditures on wharves necessary for vehicle ferriage and for other proper county road purposes, must be made from the county road fund, which the prosecuting attorney of King County so interpreted. Furthermore, ferries, like wharves, when operated or maintained by a county, have been held by the State Supreme Court in 1939 to be a part of the county road system. This decision was rendered in the case of King County v. Murrow, 199 Wash. 685, wherein the question was as to whether or not the marine insurance premiums covering the Lake Washington ferries should be paid out of the motor vehicle fund (county road fund). Hence it is believed that a brief review of ferry legislation and activities will be of interest.

In the early days of King County, transportation and communication were by water. Without roads, ferry service was essential, and in addition to the many licenses for operation across rivers granted by the county commissioners beginning in 1853, small craft operated to all points along the Puget Sound, navigating the White, Duwamish and other streams. These boats were the only contact that outlying villages had with Seattle and in fact they took the place of the stage coach in settling territory along both sides of Puget Sound. Such settlements at that time were like suburbs of Seattle, for all of them did their shopping and marketing here.

The first license issued in King County was granted in 1853 to Luther M. Collins to maintain a ferry across the Duwamish River, near his house. The license fee was $2.00 for the first year, and the rates of ferriage were 12½ cents for each footman, 50 cents for each man and horse, $1.50 for each wagon with two horses or oxen, 12½ cents each for loose cattle or horses, and 5 cents each for sheep and hogs. This and many other licenses were granted by the commissioners pursuant to legislation authorizing them to do so for periods not to exceed five years with fees ranging from $1.00 to $100.00. Commissioners were to establish and regulate the rates, and they had the power to revoke any license if the ferry operator abandoned the route, failed to pay the fee, or violated any other provisions. Although a great number of permits were issued, not one river ferry exists in King County today. Bridges now span all streams, and roads now connect nearly all points on the mainland that years ago depended on water transportation.

The development of sound and lake ferries was entirely different, as even today (aside from the Lake Washington Pontoon Bridge now building) contact between points on these waters must be made by vessel. By 1854 there were four regular lines operating on Puget Sound touching at Seattle, all of them sailing vessels, until the arrival that year of the "Beaver," which was the first steamboat to engage in local traffic on the sound. The first incorporated transportation company in which King County citizens were interested was the Puget Sound Steam Navigation Company, created by the legislature on January 5th, 1855, among whose stockholders were H. L. Yesler and C. C. Terry. Gradually steam and tug boats multiplied on the sound and by 1863 they were being built in Seattle, the first being the "J. B. Libby," and "Mary Woodruff." Soon every point was served by steamer; the Puget Sound Navigation Company being organized in 1891 and later the Kitsap Transportation Company.

By 1895 the legislature authorized counties to construct, condemn and purchase, or purchase, and to maintain ferries, with grounds, roads, approaches and landings

and to operate them free or with toll. Under this act the Orillia Ferry Co. was in 1897 the first to endeavor to transfer their enterprise at Orillia to King County, but their proposition was rejected. It was deemed more important to improve service on Lake Washington and in 1899 a contract was let to Moran Brothers Company for $22,800.00 for the construction of a ferry. Completed at a cost of $25,183.72 it was named "King County" and the following personnel employed to operate it: George Bartsch as captain at $100.00 monthly, engineer $100.00, pilot $80.00, purser $80.00, fireman $70.00 and night watchman $65.00. Ferry slips at Madison Street in Seattle and at Kirkland, were contracted for in 1900, rates were established and the county began operation the same year.

Evidently not successful, the ferry was leased in 1901 to George Bartsch and H. E. Tompkins for three years, they to receive all receipts and $375.00 monthly. Renewed in 1904 for a similar period the lessee received $140.00 per month and all receipts, overhaul and insurance to be paid by the county. In 1907 the "King County" sank, was raised at county expense, with Captain Bartsch employed as superintendent of these operations, and finally sold to him for $750.00.

The lease having expired, the county decided to construct a new ferry boat, named "Washington," costing $78,658.16 and to operate it. Until completed, the Anderson Steamboat Co. was allowed $300.00 monthly for ferriage by barge between Madison Park and Kirkland. By 1908 the county was again in the transportation service and eleven years later they had twelve vessels, seven owned outright and five leased from others, and were employing a superintendent of transportation. By 1920 all leased boats were acquired, the total expenditures for purchases and operation being approximately $690 000.00 including only the Leschi terminal, the others being maintained out of the ferry wharves and docks budget. For 1921, operation and maintenance alone amounted to about $475,000.00, which led to the decision to turn the system over to private parties.

Resolution No. 805, passed August 1, 1921, provided for the calling of bids for the lease of the county ferries. Involved were the steamboats Lincoln, Leschi, Fortuna, Washington, West Seattle, Atlanta, Aquila and Dawn; the diesel powered Vashon Island and Robert Bridges; launches Dr. Martin and Mercer. The routes over which these operated were Madison Park to Kirkland, Leschi Park to Medina, Leschi Park to Roanoke, and Elliott Bay (or Fauntleroy) to Vashon Heights to Harper. The successful bidders were the Kitsap County Transportation Company to whom the "Washington" and "West Seattle" were leased for the Puget Sound run for ten years, and J. L. Anderson who leased the remaining vessels for use on Lake Washington, for a similar period.

Both of these firms are still operating county ferries under lease, though legislation permitting counties to engage in this service is still in force. An attempt was made recently to bring the Lake Washington lines back under the county, but it was unsuccessful.

FEDERAL AID PROJECTS

Participation of the United States in public works construction in King County has been made through the Public Works Administration and the Works Progress Administration. By far the latter method of aid in financing provided most of the assistance received.

W. P. A. PARTICIPATION IN HIGHWAY CONSTRUCTION

The need for utilizing the labor of those on relief is not a new problem facing King County. As far back as 1908 there appears a record in the commissioners proceedings showing that $5,000.00 was appropriated by the county to join with the city in providing work for the unemployed in the improvement of highways leading into Seattle. So that the large sums set aside for road construction and repairs since the initiation of the W. P. A. work-relief program have served the dual purpose of helping those in need and rehabilitating the King County road system. The need continued throughout 1939, but congressional action tended to limit W. P. A. funds with the result that their contribution in labor was the smallest in years. Projects already set up for 1940 show a slight increase, with more in line for W. P. A. approval.

PROJECTS	DISTRICT NO. 2		DISTRICT NO. 3		TOTAL	
	No. of Projects	Amount	No. of Projects	Amount	No. of Projects	Amount
1939—Completed	4	$ 71,998.60	3	$ 19,887.45	7	$ 91,886.05
1939—Under Way	5	57,862.99	3	35,517.95	8	93,380.94
1940—Proposed	12	86,078.21	10	104,483.62	22	190,561.83

King County's Share of Completed W. P. A. Projects

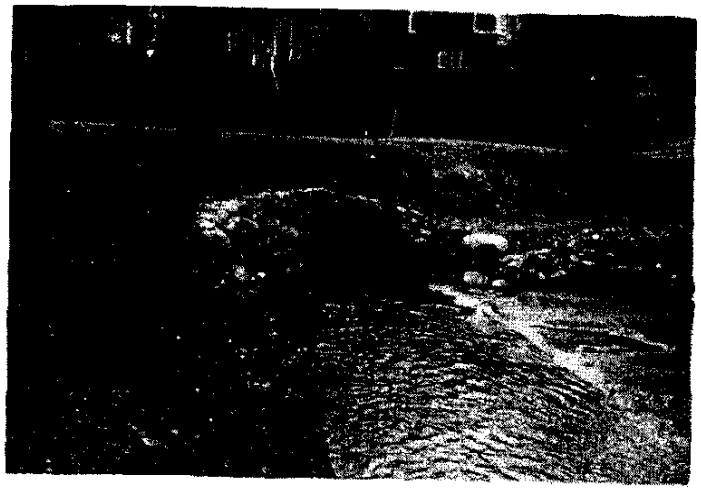
1936	$161,329.00
1937	90,339.00
1938	302,330.00
1939	24,457.00
TOTAL	$578,455.00

P. W. A. PARTICIPATION IN HIGHWAY CONSTRUCTION

This is effected by means of grants in aid amounting generally to 45 per cent of the total cost. The county advances the entire cost, and then on application to the governmental authorities receives a refund of the amount of grant decided upon. For 1939 the following were claimed and received:

Project Number	Name of Project	Docket Number	Allotment	Amount Claimed	Amount Received
CRP 45	15th Avenue N. E. Paving	1532-F	$15,480.00	$14,234.00	$14,046.89
81	Enumclaw-Campton Road	1300-F	15,120.00	14,287.54	13,754.68
138	Holman Road—Units 1-2-3	1431-F	52,816.00	52,816.00	52,816.00
	TOTALS		$83,416.00	$81,337.54	$80,617.57

W. P. A. HIGHWAY CONSTRUCTION



Installation of 42-inch Armco Culvert

Brockman Addition Grading Operations

Brockman Addition Grading Completed

KING COUNTY AIRPORT—C. A. A. WAREHOUSE
(P. W. A. Project)

Construction 1939

In accordance with the plan of developing strategically placed airports throughout the country which could be used for military purposes in time of emergency, the Civil Aeronautics Authority chose King County airport as one of its headquarters. In order to accommodate them special construction for their use was necessary, for which a lease was signed for five years at $300.00 per month or $18,000.00. A federal grant having been arranged for to aid in financing the project, the county commissioners authorized the building of the warehouse and office structure.

Work was begun by the general contractors, the Washington Construction Company, on November 18th, 1938 and completed on March 6th, 1939, at a total cost of $35,891.81. P. W.A. original allotment was $18,000.00, but only $17,088.44 was claimed. Certain items being disallowed, the federal refund amounted only to $16,555.18.

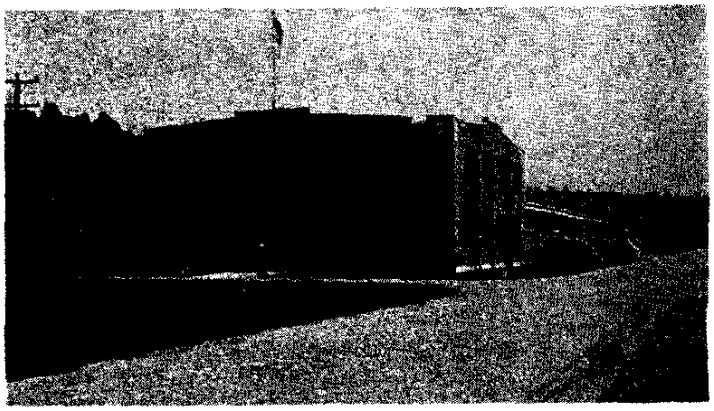
The building is of masonry construction, the main structure being two stories high and sixty-two feet square, for office use, attached to which is a one-story warehouse 180 feet long by 60 feet wide, for shops and storage. The completion of the project has brought to Seattle about two hundred employees, but a large increase in staff has already become necessary.

Under a separate contract, the Washington Construction Company built a 40x40 foot addition over the north wing of the administration building, for use as control tower. Fully equipped with the necessary technical machinery the cost approximates $9,000.00.

Proposed for 1940

Addition to the C. A. A. Building. Due to the necessity for an increase in personnel, an addition to the existing building is urgently needed. Plans for this construction, as well as for a 14-car garage, are already completed, and as soon as funds become available a contract will be let at an estimated cost of $20,000.00.

New Airplane Hangar. Plans are being prepared in the county engineer's office for a large airplane hangar, which is very essential if the King County Airport is to give the service that may soon be required in view of the international situation. To cost about $180,000.00, the county authorities are exploring ways to finance this work with federal aid, and if successful a contract will be awarded during the coming year.



Completed Structure

KING COUNTY AIRPORT—BOEING FIELD
(W. P. A. Project)

Begun in 1936, work proceeded continuously until September of 1939, when the project was permanently closed down on orders from Washington, D. C. The county engineer's office continued to provide the engineering and supervision.

Estimated Cost. W. P. A.....$539,490. King County.....$46,480. Total.....$585.970. Of this amount approximately $490,998 has been expended. King County's share which was originally supposed to be $2,200 was increased to $46,480 but even this has been exceeded, disbursements on the part of the county reaching a total of about $89,118.71.

Work Completed. Before the project was discontinued 17,000 linear feet of six-foot steel fence was built around the entire field costing some $35,000.00. The balance of graveling still was to be done, but due to the shut-down of all projects running three or four years, a new proposal will have to be made to the W. P.A. authorities.

Work Done	1936	1937	1938	1939	Total
Drain Pipe, 8" to 30"	$ 82,678	$ 8,000	$	$	$ 90,678
Manholes, Catch Basins, etc.	12,000	1,000	.....	.....	13,000
Gravel Backfill	8,500	6,500	.....	.....	15,000
Grade New Runways	36,189	61,000	23,000	.....	120,189
Gravel Resurfacing	3,000	29,400	82,000	.....	114,400
Remove Blacktop and Grade Old Runway	23,269	.....	.....	.....	23,269
Electrical Installation	.....	.....	20,000	.....	20,000
Scarifying	.....	.....	8,000	.....	8,000
Landscaping	.....	.....	10,000	.....	10,000
Fencing	.....	.....	.....	35,000	35,000
Miscellaneous	32,900	3,562	5,000	.....	41,462
TOTAL	$198,536	$109,462	$148,000	$ 35,000	$490,998

Proposed for 1940

Field Surfacing Project. Application is being made to the W. P. A. for the following work to cost approximately $94,600 of which King County's share as sponsor is to be $36,600:

1. Complete the base graveling of beam runway No. 4.
2. Surface beam runway No. 4 with raylig-bound base and asphalt seal coat.
3. Fine grade entire landable area.
4. Seed a fifty-foot strip surrounding the runways.
5. Landscaping around buildings.
6. Construct parking areas.

Sewer Project.—W. P. A. approval has already been obtained and work will begin as soon as funds are allotted. This construction calls for a new sanitary sewer, 1.02 miles long, serving all the buildings on the field, to cost about $37,393 with King County as sponsor furnishing $10,067.

DEPARTMENT OF PLANS AND SURVEYS

Under the direction of Engineer of Plans and Surveys D. L. Evans are the drafting room, blue-print plant, counter and record vault. The duties of this department include working up notes on surveys of all kinds; preparing establishment papers. deeds, and other necessary documents; resolutions, estimates and plans for various types of construction; segregation of assessments; traffic surveys when required, etc. Here also the court draftsman prepares engineering maps and other data for the county prosecutor.

DRAFTING ROOM

During the course of the year about 175 plans for different projects were prepared, 80 detailed estimates calculated, and 120 resolutions submitted for establishment, improvement and vacation of various roads. In addition much work was accomplished on non-road projects, and services rendered to other county units, as requested and generally gratis. A detailed list of the cost of office work in this connection will be found in the section headed "Accounting."

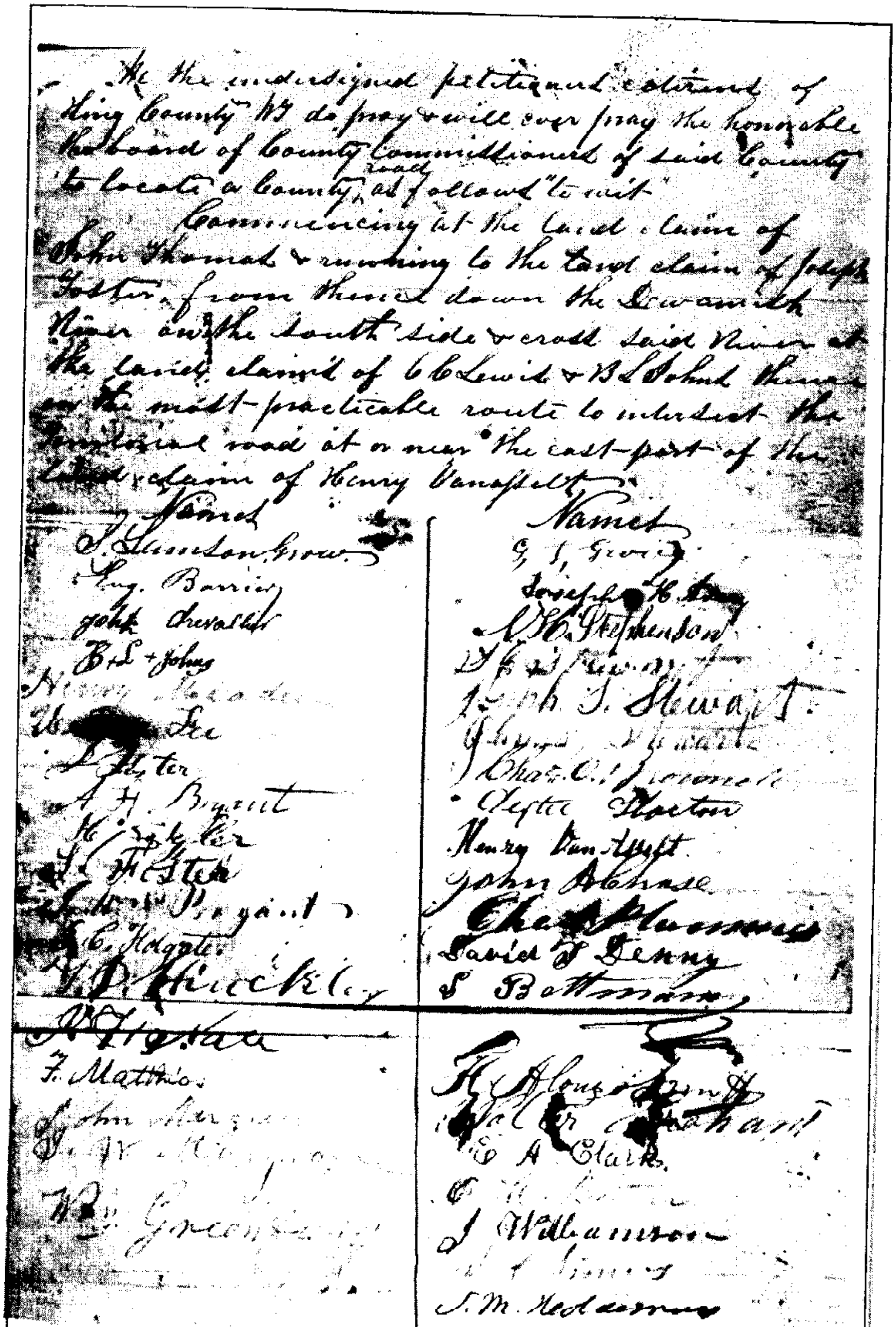
Map work done during the year included work on those for North and South District roads, King County bridges, state traffic survey, house numbering, street names, King County relief and section maps, and amounted to $3,258.53 from county engineer's funds.

ROAD PETITIONS

Though the county commissioners have had authority since the beginning to establish roads on their own initiative, petitions have been responsible for most of the highways in the county. The first legislation in 1854 required on each application the names of at least twelve house-holders, resident in the vicinity of the proposed improvement, and two days labor was also exacted if the petition was granted. This work provision seems gradually to have been eliminated, but twelve signatures were necessary until 1893. That year, and confirmed by each succeeding act relating to the establishment of roads, only a minimum of ten persons, variously called householders or freeholders, had to sign petitions for improvements in order to receive the proper consideration of the county commissioners. Generally, petitioners had to furnish bond to guarantee payment of county costs should their application be denied. In 1901 the law gave commissioners the discretion of requiring the principal petitioner to secure waivers for the necessary right-of-way before even considering their request.

A search of the records in the offices of the commissioners, auditor and engineer, reveals that, excluding territorial roads, there have been about 3,500 petitions filed between 1855 and 1939, or an average of approximately 41 per year. It might be assumed that with roads in all directions there would be a dearth of petitions, but the reverse is true. The record shows that in depression years there were few applications for road improvements, but as soon as conditions became better requests began to come more freely. The recent experience is no different, which found the years 1937 and 1938 with 222 and 229 petitions respectively, the heaviest since the earliest days. This year only 89 were received which were handled as follows:

Action Taken	District No. 2	District No. 3	Total
Petitions received	27	62	89
Referred to Road Engineer	27	61	88
Recommended by Road Engineer	16	22	38
Rejected by Road Engineer	11	27	38
Pending	....	12	12
For district action	....	1	1



We the undersigned petitioners citizens of King County W.T. do pray & will ever pray the honorable the board of County Commissioners of said County to locate a County road as follows "to wit"

Commencing at the land claim of John Thomas & running to the land claim of Joseph Foster, from thence down the Dwamish River on the South side & cross said River at the land claim of C C Lewis & B L Johns thence on the most practicable route to intersect the Territorial road at or near the east part of the land claim of Henry Vanasselt.

Names	Names
T. Jameson Grow	G. F. Grow
Aug. Bonney	Joseph [illegible]
John Chevalier	S. H. Stephenson
B L Johns	[illegible]
Henry [illegible]	Joseph T. Stewart
[illegible] Lee	[illegible]
J. Foster	Chas. C. [illegible]
A. H. Bryant	Lester Horton
H. [illegible]	Henry Van Asselt
J. [illegible]	John [illegible] Chase
[illegible] Bryant	[illegible]
L. C. Holgate	David T. Denny
[illegible] Hinckley	S Bettman
[illegible]	[illegible]
F. Matthias	[illegible]
John [illegible]	[illegible]
[illegible]	E. A. Clark
[illegible]	[illegible]
Wm. [illegible]	J. Williamson
	[illegible]
	S. M. Hedges

FIRST ROAD PETITION FILED
Road from John Thomas to Henry Van Asselt Claims.
Known as County Road No. 2

ROAD ESTABLISHMENTS

The record in the county engineer's office begins in 1860. Prior to that highways were viewed, surveyed, and built without an official establishment. So frequently was this done that in 1867 the legislature decreed that all roads now opened and travelled were declared public roads, and that no new ones would be legal until recorded in the book.

Besides, not all petitions were granted, so that the number of establishments is naturally far less than the applications received. From 1860 to 1939 there were a total of 2,142 establishments or an average of about 27 per year. For 1937 to 1939 the detailed record follows:

District	1937	1938	1939
South District No. 2	13	58	20
North District No. 3	14	29	15
TOTAL	27	87	35

SURVEYS

All requests for surveys are passed to Chief Survey Engineer C. Glen Smith, after first being recorded in the drafting room. Four field parties operated throughout the year on location and construction work. Reconnaissance surveys were also made, principally by the district engineers, in close cooperation with the engineer of plans and surveys and the chief survey engineer, all licensed engineers.

Not always were such surveys in the hands of professional men. Undoubtedly because of the scarcity of technical engineers among the pioneers, early legislation did not insist on qualified viewers, as they were then called. In 1854 the law provided that three disinterested householders were to be appointed by the county commissioners to locate and mark roads petitioned for establishment or relocation, for which service they were to receive $3.00 per day. They were to take an oath to perform their duty faithfully and were subject to a fine of $10.00 in case of neglect. Their rate of pay varied from $3.00 in 1854, to $2.00 in 1869, at the commissioners' discretion in 1871, $2.50 in 1890, and back again to $2.00 in 1895 until the use of viewers was discontinued about 1902.

Of help to these non-professional men was legislation passed in 1869, which for the first time gave detailed instructions in the manner of making surveys. As road operations became more intensified it was undoubtedly realized that laymen could not cope with the situation, for in 1881 the commissioners were authorized to appoint three viewers, one of whom was to be a surveyor. In 1890 three disinterested freeholders were again utilized to view roads but the commissioners were required to hire a surveyor or civil engineer as well. By 1893 they were back again to the status of 1881, appointing three residents as viewers, one of whom might be the county surveyor, and two years later it was mandatory that this official be one of them. By 1902 petitions for road improvements were being referred by the commissioners directly to the county surveyor for view and survey.

Seattle April 8th 1862

Personally came J. W. Bozeal and made oath to perform the duties as Road viewer to view out the a road from Renquest to Squak Prairie faithfully

before me S. F. Coutts
Auditor

VIEWER'S OATH OF OFFICE

Seattle March 5th 1855

We the undersigned having been appointed by the Board of County Commissioners of King County Washington Territory to view and locate a County Road; Leaving the Territorial Road at the Land Claim of Henry Van Asselt, thence up the Duwampish River, and Cross said river at the Land Claims of B. L. Johns and C. C. Lewis. Thence runing up on the South Side of White river and Intersects the Territorial Road at the Land Claim of John Thomas. We would beg leave to report that we have discharged the duty assigned to us and find the said Road Practicable for Public Utility and the ground over which it passes generally very favorable The Expenses of said Road are Eight days Service performed by the undersigned

John Flemming
W. H. Gilliam
Chas. C. Jones

VIEWER'S REPORT—(RECONNAISSANCE SURVEY)
Road from John Thomas to Henry Van Asselt Claims.
Known as County Road No. 2.

SURVEYS BY TYPE AND COST—1939

TYPE OF SURVEY	District No. 2		District No. 3		Both Districts	
	No.	Amount	No.	Amount	No.	Amount
Paving, Concrete	....	$	1	$ 1,575.19	1	$ 1,575.19
Sidewalks	6	2,675.68	3	289.28	9	2,964.96
Grading	19	6,013.03	15	5,499.20	34	11,512.23
Flood Control	....	.....	19	6,212.12	19	6,212.12
Drainage	2	162.10	9	1,121.00	11	1,283.10
Sewers	....	.....	6	2,197.12	6	2,197.12
Location	68	9,824.27	61	7,195.87	129	17,020.14
Property Lines	7	1,008.49	5	660.52	12	1,669.01
Plats	2	71.88	4	272.21	6	344.09
Miscellaneous	2	168.72	1	54.34	3	223.06
Total	106	$ 19,924.17	124	$ 25,076.85	230	$ 45,001.02
W. P. A. Triangulation Survey	....	.....	....	.....	1	2,395.58
TOTAL	106	$ 19,924.17	124	$ 25,076.85	231	$ 47,396.60

SURVEYS BY CLASSIFICATION AND COST—1939

CLASSIFICATION	District No. 2		District No. 3		Both Districts	
	No.	Amount	No.	Amount	No.	Amount
Contract Projects	....	$	1	$ 3,291.86	1	$ 3,291.86
County Road Projects	18	8,965.23	14	4,440.54	32	13,405.77
Road District Projects	56	8,361.13	56	6,891.39	112	15,252.52
Docks & Wharves	3	209.18	4	235.53	7	444.71
Parks and Playgrounds	4	434.77	4	706.41	8	1,141.18
W. P. A. Projects	10	2,086.39	....	.....	10	2,086.39
River Improvement	....	.....	19	6,212.12	19	6,212.12
Budget	15	415.77	26	2,750.70	41	3,166.47
Total	106	$ 20,472.47	124	$ 24,528.55	230	$ 45,001.02
W. P. A. Triangulation Survey	....	.....	....	.....	1	2,395.58
TOTAL	106	$ 20,472.47	124	$ 24,528.55	231	$ 47,396.60

W. P. A. ENGINEERING LAND SURVEY
(Triangulation Controlled)

Begun in 1937, this project for the establishment and coordination of all section corners continued through 1939, with a shut-down for about three months due to lack of W. P. A. funds. An outgrowth of W. P. A. projects for the recovery of section corners and land use in connection with an aerial survey, the object of the present effort is to coordinate and monument with permanent markers, the corners so recovered. Though the original estimated cost of $139,115.00 has already been exceeded, additional funds have been made available by both the county and the W. P. A. authorities, so as to complete this worth while project.

FIELD WORK ACCOMPLISHED		OFFICE WORK ACCOMPLISHED	
Section corners tied in	273	Sta. Computed to Lambert Grid Section corners	482
Section corners set	273	Traverse monuments	2204
Miles of traverse	260.82	Miles of level line adjusted	398
Traverse monuments set	1198	Miles of traverse abstracted	275.5
All other permanent monuments	1026	Miles of traverse computed	434.5
Miles of levels	260.82		

COST OF PROJECTS TO END OF 1939

	County	W.P.A.	Total
Salaries & Industrial Insurance	$ 5,399.25	$188,207.91	$193,607.16
Transportation & Supplies	9,443.09	500.81	9,943.90
TOTAL	$ 14,842.34	$188,708.72	$203,551.06

PLATS

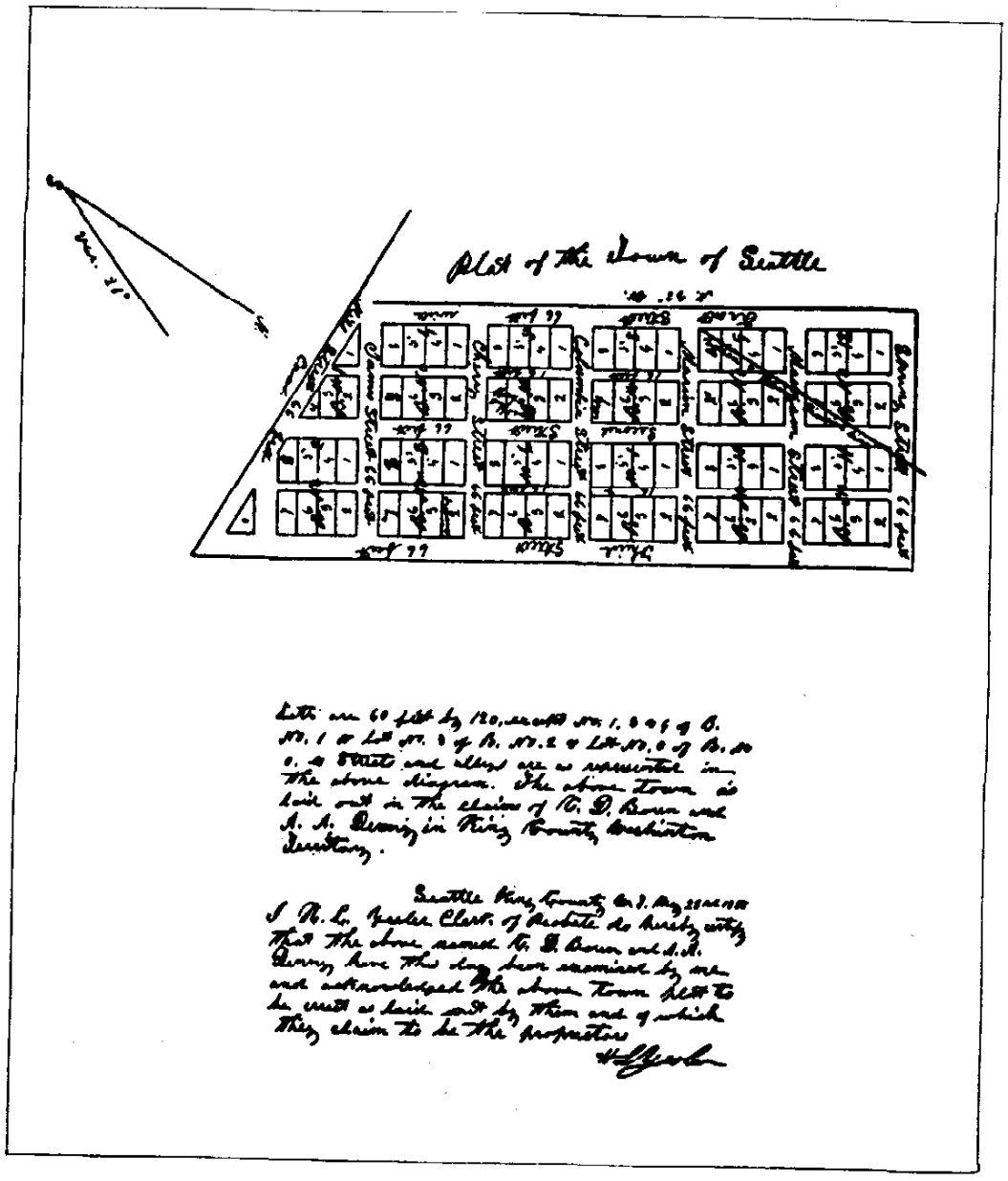
The town of Seattle was first platted on May 23rd, 1853 by A. A. Denny and C. D. Boren. D. S. Maynard filed his own townsite plat, due to a disagreement with the others as to the base line near the shore; hence there was a jog of half a block where the two sets of streets touched Yesler Way, since overcome by curving the avenues north of that thoroughfare to meet those going south. The area in the Denny-Boren instrument extended from Yesler Way to Spring Street, First to Third Avenues, and included twelve blocks. Maynard's was bounded by Yesler Way, Dearborn Street, Eighth Avenue South and Elliott Bay and consisted of fifty-eight blocks. Following these, the early pioneers filed their individual plats, Boren in 1854, A. A. Denny and W. N. Bell in 1858, Edward Hanford and D. T. Denny in 1869, Thomas Mercer in 1870, etc. Not to be behind Denny, Boren and Maynard, C. C. Terry decided also to plat the town of Alki, consisting of six blocks, which he filed on May 28th, 1853. Recorded the next year, it was subsequently vacated.

The first legislation on this subject was passed in 1858. It provided that townsite plats or additions thereto had to be recorded before the sale of lots could be made; that land donated for highway or other purposes was to be accepted as being quit-claimed; and that streets and alleys so donated were to be considered as public highways. County commissioners were authorized to vacate lots or dedicated thoroughfares on proper petitions, lots reverting to the former owners, and streets or alleys to adjoining property. Vacation or townsites was also provided for, if they remained unimproved. Under this legislation the first record of the vacation of a plat was that of Clark's Addition to Seattle in 1872. Up to about 1902 the commissioners approved new filings without first referring them to the county surveyor, but gradually the recommendations of that official were first secured. By 1907, even before that could be done, certain requirements were for the first time exacted of real estate operators, the most important of which related to the width of thoroughfares, conformity with the plan of adjacent plats, and with the topography where a regular street arrangement would produce excessive grades.

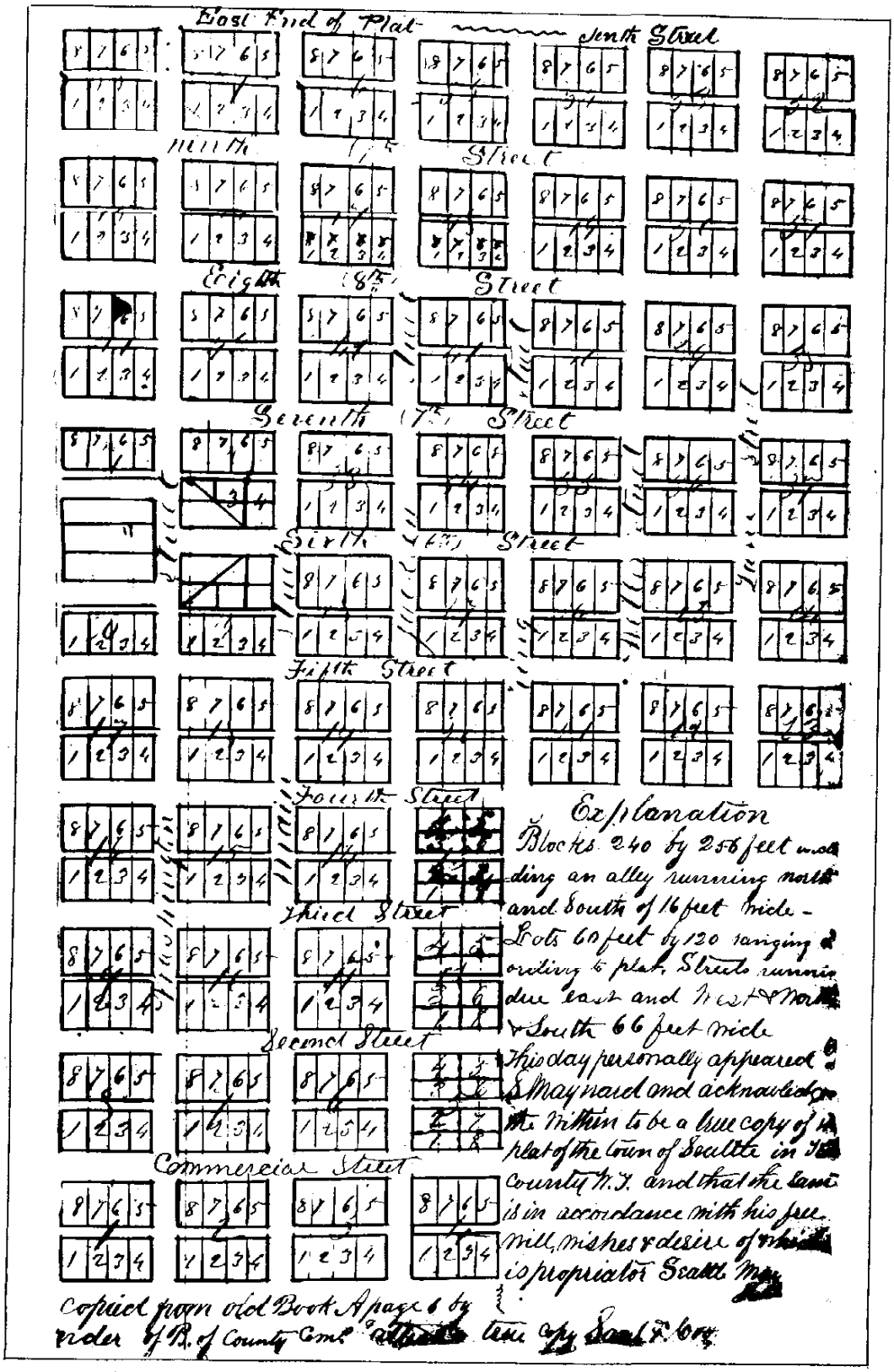
Thus the county began to exercise greater control over the platting of additions, and when the King County Planning Commission was created their approval became necessary. Legislation in 1937 not only confirmed this, but also authorized the planners to establish rules and regulations, provided for surveys of proposed plats, and required decision to be made within sixty days during which time no sales of land were to be consummated under penalty. Pursuant to this act Resolution No. 6735, December 31. 1937 requires that the county engineer examine and check all tentative plats to see that all regulations are being adhered to before the King County Planning Commission may approve.

Since the first plat was filed in 1853, a total of about 2,950 have been recorded up to date. The growth of Seattle and King County may be traced by the number of additions submitted each year. Space does not permit their detailed mention here, but it will be of interest to note that activity in this field coincided with the general welfare of the community. Lean years saw few plats filed whereas prosperous times witnessed a great increase, the largest being in 1890 when the gold fever caused such a decided growth in this territory, that 308 plats passed through the county offices. For 1939 the total was 25, all approved, of which 19 were recorded for North District No. 3 and six for South District No. 2.

In addition to the usual work of examining and making recommendations on plats submitted to this office during 1939 all plat books were repaired, filed and properly indexed, entailing an expenditure of $849.40 which, added to the cost of surveys amounting to $344.09, made a total disbursed from county engineer's funds of $1,193.49.



FIRST PLAT OF TOWN OF SEATTLE
Filed by A. A. Denny and C. D. Boren
(Reprinted from Denny's "Pioneer Days on Puget Sound")



SECOND PLAT OF TOWN OF SEATTLE
Filed by D. S. Maynard

TRAFFIC SURVEYS

Though in 1854 there were very few roads in King County, and very little traffic, the legislature's first act in relation to highway travel was to require road supervisors to erect and maintain directional signs at very junction and crossing. Ever since, this has been an obligation of the county commissioners, and since 1917, such signs were required to be built according to state standard plans.

The first rule of the road, when highways were narrow and the horse provided the motive power for transportation, was the requirement in 1869 that vehicles when meeting must turn to the right. Followed in 1871 prohibiting speed faster than a walk over county bridges, in 1909 making it unlawful to discard glass, tacks, and nails on highways, in 1913 regulating the load of vehicles in proportion to tire width, the year 1915 witnessed the passage of the first complete act relating to the use of the public highways, the rights and remedies of persons thereon, the licensing of motor vehicles and the fees therefor. From this time forward regulations continued to multiply to keep pace with the increased use of public roads by motorized traffic.

All laws relating to motor vehicles culminated in the passage of Chapter 188, Laws of 1937, known as the Washington Highway License Act. This provides rules and regulations governing the ownership and registration of vehicles, the licensing thereof, and the licensing of motor vehicle operators. Laws hitherto passed prescribing rules of the road and relating to the operation of motor vehicles, and the rights of those using highways, have all been consolidated in Chapter 189, Laws of 1937, called the Washington Motor Vehicle Act. It specifies requirements as to vehicle inspection, lighting and equipment; regulates transportation of explosives and inflammables; defines speed limits in city, county and state; determines rules of the road governing behavior of operators and pedestrians; dictates procedure in case of accidents, etc.

It is probably true that the limited speed of horse-drawn equipment presented no appreciable traffic problem or hazard, for it appears that no survey was made until 1916. In that year and the next there was a thorough check of the confused traffic conditions that must have resulted from the use of public highways by both horse-drawn and motor vehicles. As the first mentioned mode of transportation practically disappeared, the need for further traffic surveys ceased for ten years. With the beginning of the prosperous era the number of automobiles so increased as to necessitate another review of conditions in 1927, since when periodic checks have been the rule. The last two, in 1936 and 1939, were under the direction of the state highway department, traffic being counted daily at control stations and once a week at the one-day stations. The data obtained helps not only in making plans to eliminate accidents, but in deciding future road improvements.

In the table of results here given only the total number of vehicles counted is shown as space is lacking to present figures concerning the classification or the average for a 24-hour day. It is also impossible to name the various classifications though it may be said that provision in each survey has been made to include the various modes of transportation that have been increasingly used from year to year. Thus the first check in 1916 took account of motor trucks, motor stages, motorcycles, pleasure cars, horses and horse-drawn epuipment. The latest survey eliminates the last mentioned item, adds trailers to pleasure cars and trucks, and includes tractor trucks and miscellaneous heavy vehicles, such as graders, etc .

Year	Traffic Stations	Vehicles Counted	Year	Traffic Stations	Vehicles Counted
1916	1	30,301	1930	5	6,405
1917	11	38,660	1931	26	46,714
1927	4	10,757	1934	24	63,055
1928	24	40,555	1935	85	138,285
1929	34	61.458	1936	219	281,481
			1939	51	109,537

Eliminating traffic hazards has been the object of the appointment of Dr. D. M. Reid as Traffic Safety Inspector, by County Commissioner Tom Smith. Every effort is being made to study conditions scientifically, and to popularize the program it is expected that in 1940 there will be weekly radio broadcasts featuring the Safety Bandwagon Radio Traffic Safety Quiz, with all King County schools invited to participate.

BLUE PRINT PLANT

Of the 1939 production of 62,000 square feet, approximately 32,500 were for outside offices and agencies, of which the Aerial Survey Project received about 23,500. For most of this work no charge has been made.

Cost of Operations

Materials and Supplies	$ 157.84
Repairs and Gas	11.77
Labor (part time)	726.56
10 per cent Depreciation on Machinery	185.00
Total	$1,081.17

Cost Per Square Foot

Based on the average charge made by commercial blue print companies, the county has since the installation of its own plant been able to cut the cost as the following table will show:

Year	Production Square Feet	Commercial Cost-Average	County Cost	Saving per Square Foot
1935	26,000	3.35 cts.	1.75 cts.	1.60 cts.
1936	108,000	3.00	1.38	1.62
1937	46,000	3.05	2.75	.30
1938	78,000	3.00	1.50	1.50
1939	62,000	4.00	1.74	2.26

RECORD VAULT

The first record in connection with highways was the road book, which in accordance with an act passed in 1854 was to be kept by the county auditor, and into which were to be entered the viewers' report, surveyor's return and the plat of the road, etc. It was also provided that no road was to be opened unless this information was duly written in the road book, and that no new road would be held legal unless so entered. In 1890 the county auditor was required by legislation to keep a record of all proceedings relating to roads, which continued to be the practice until the office of county surveyor was regularly established, since which time complete files have been maintained in that department.

The procedure is for all papers to pass through the record clerk in the drafting room, who keeps all the information up to date for ready reference. He lists all surveys, and has charge of the accounting details of all activities in the drafting room, such as material, labor and transportation costs on all projects. Documents retained in the vault include:

Maps, Plans, Profiles, Cross Sections and Grade Sheets concerning roads.
Road Establishment Papers and ten volumes of old County Road Records.
Inspectors' and Construction Notes; County, C. W. A. Government and Topographical Field Books.
Survey Traverses, Estimates and Quantities.
Map and Detail of Bridges, Docks and Wharves.
Section, Township, Road, Property and Industrial Site Maps.
Railroad Right-of-Way and Grade Crossing Maps.
Flood Control and Drainage Districts; and King County Airport Maps.
Government and C. W. A. Contour Maps, and four books of State Highway Maps.
Original Tracings of Plats.

COUNTER

To serve the public, a clerk is on continuous duty at the counter, where there are kept a complete set of maps and other books of record, many being duplicates of those in the vault. Information is furnished concerning house numbers, proposed or existing roads, and property boundaries. Requests for maps and blueprints are also attended to. Complainants are received by the counter clerk and referred to the member of the staff concerned for necessary adjustment of the trouble. In general the counter clerk is the contact between the public and the county road engineer's office and in that capacity efficient service has been rendered the year round.

COURT WORK

Under the direct supervision of the county engineer, this branch of the office is engaged in supplying the prosecuting attorney with the proper technical information and data in the handling of suits involving damage to property, condemnation of land, personal injury and other civil actions. The work involves the preparation of plans, surveys and other engineering data, and the keeping of adequate files for the disposition of claims. During the year this office participated in the following civil cases:

Plaintiff (Defendant King County)	Nature	Amount Claimed	Disposition
Willoughby Dorgan	Personal injury	$ 2,500.00	Denied
Water District No. 25	Property damage	100.00	$25.00
Ettinger	Personal injury	38,000.00	$3,250.00
N. P. R. R.	Slide damage	2,100.00	Pending
Carmichael Quarry	Injunction asked		Denied
Badminton	Personal injury	2,550.00	Denied
Noel	Personal injury	10,000.00	Denied
Benson	Personal injury	53,000.00	Pending
Fritch	Personal injury	2,500.00	$482.00 appealed
Rian Johansen	Personal injury	65,000.00	Denied n.o.v.
Dawson	Condemnation	3,000.00	Denied
Deatherage	R/W claim	500.00	$125.00
Reed	Personal injury	1,250.00	Denied
Mullen	Personal injury	13,000.00	Pending
Ballard School District	Personal injury	5,000.00	Denied
School District No. 1	Personal injury	5,000.00	Pending
H. O. L. C.	Flood damage	1,000.00	Denied
C. P. Meyers	Flood damage	4,000.00	Denied

In addition to the civil claims the following work was performed, during the year just passed:

87 plans drawn for presentation in criminal cases.

24 plans prepared for coroner's inquests.

35 plans presented in police cases.

94 sketches and maps were prepared covering miscellaneous claims including maps for right-of-way agents to assist them in securing easements, deeds, releases, etc.

RIGHT-OF-WAY DEPARTMENT

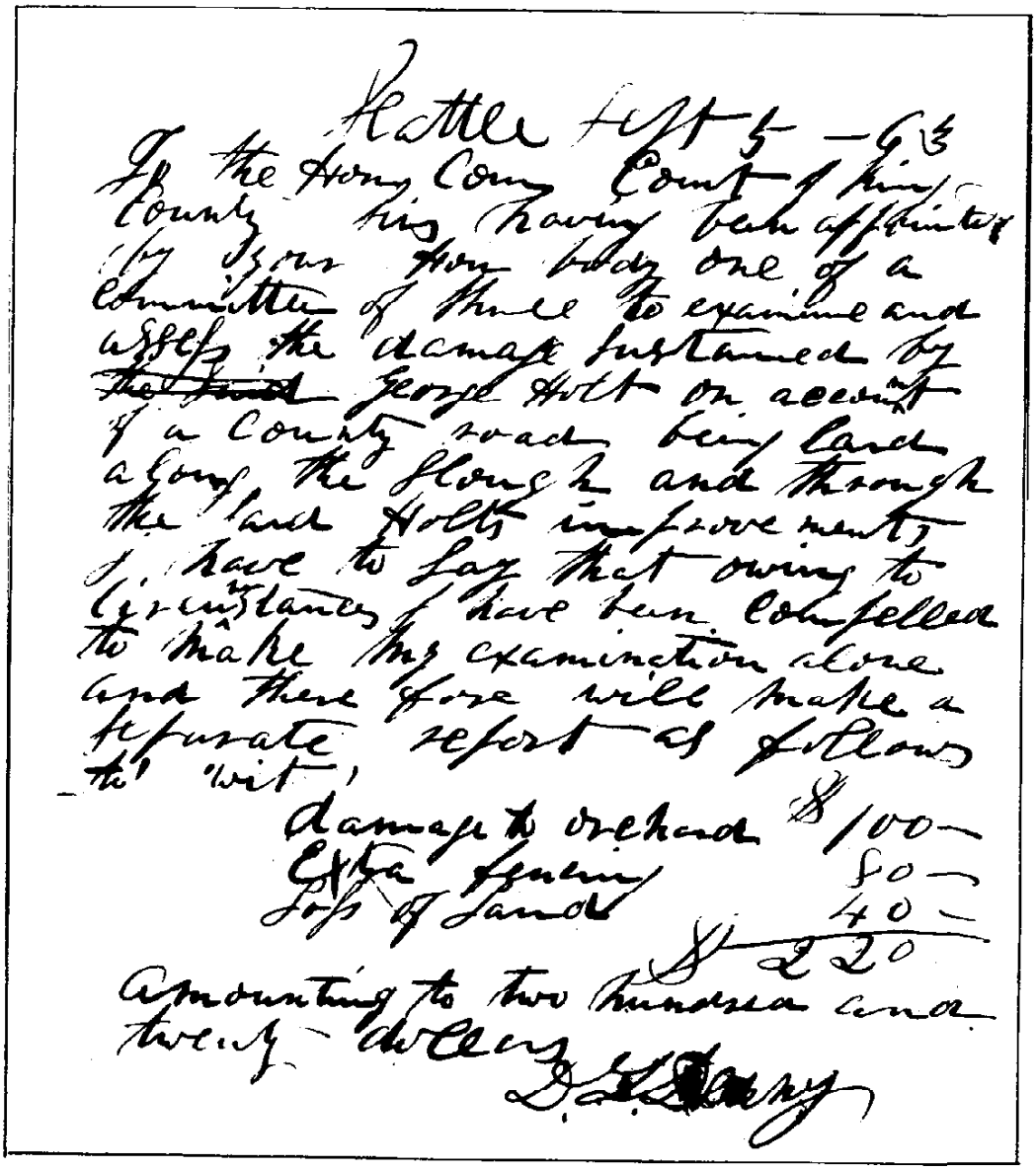
Consolidated in 1937, right-of-way, franchises, permits, vacations, and inspections were placed under the direction of Court Engineer N. C. Anderson. This department is a development over a period of years as the securing of right-of-way grew in volume and importance. Not always has it been a problem. In fact, there is very little in early legislation which concerns right-of-way. It would seem that with the pioneers eager to project roads to connect their various claims and settlements, and with most of the territory still public domain, there was plenty of land through which highways might be built without infringing on the rights of property-owners.

The first contingency in connection with proposed road improvements was not right-of-way, but rather damages. Even the earliest legislation in 1854 provided for redress where any person felt himself aggrieved due to roads being located through his land. In such an event three disinterested householders were appointed as viewers to determine the nature and value of damages. The first claim recorded was reported on by D. T. Denny on September 5th, 1863 as one of three viewers who examined the property of George Holt and found that he was damaged to the extent of $220.00 caused by a road running through his farm. This might also be considered the first right-of-way transaction. Subsequent legislation in 1867, in connection with damages provided that persons aggrieved by the action of any road supervisor in extracting material from his land or building ditches thereon might seek redress. In 1890 it was also provided that in case of relocation of roads due to washouts, persons damaged might claim on the commissioners. In all these cases and until about 1902 the appraisers were always three viewers appointed by the commissioners, who examined the premises, determined damages and reported their findings. On occasion, depending on the law in force at the time, one of the viewers might be the county surveyor.

If the damages assessed were unacceptable to the property owners, the law provided beginning in 1890 that the commissioners might condemn to secure the necessary right-of-way. Later, condemnation was provided for purposes of relocation or widening of roads, where deemed a vital public necessity. In 1901 it was decreed that the commissioners might require waivers of right-of-way to be secured by the principal petitioner, and that the surveyor's report was to consist of a statement of interested parties consenting to the road and either waiving damage or claiming a certain amount. There grew out of these beginnings a definite function of the county engineer's office, charged with right-of-way matters, which developed into the present department.

Encroachments on county right-of-way are another feature which engages the attention of this division. As early as 1866, supervisors were by law authorized to remove obstructions to roads, the county to pay damages (perhaps in lieu of right-of-way), but it was a peculiar condition that buildings could not be removed and that roads had to be relocated around them. The first notice recorded in the proceedings of the county commissioners in connection with encroachments occurred in 1885 where the county auditor was directed to notify a certain John Gove to remove his fence from the county road between his land and the adjoining property, the county owning the said right-of-way by virtue of purchase in 1872 from the former owner Joseph Gilson.

In the earliest days there were many defects in county title probably because roads which were badly needed were just built, without inquiry into right-of-way. Hence, as far back as 1855 the commissioners had to declare highways opened and traveled as lawful county roads, which was re-affirmed by law at various times, in 1879 it being determined by legislation that all roads surveyed and of record were declared to be lawful public highways regardless of defect in procedure. This in 1890



Kettle Apt 5 — 63

To the Hon. Com. Court of this County. Sirs, Having been appointed by your Hon. body one of a committee of three to examine and assess the damage sustained by ~~the land~~ George Holt on account of a County road being laid across the slough and through the land Holts improvements I have to say that owing to circumstances I have been compelled to make my examination alone and therefore will make a separate report as follows to wit,

Damage to orchard	$100—
Extra fencing	50—
Loss of land	40—
	$220

Amounting to two hundred and twenty dollars

D. [illegible]

FIRST DAMAGES ALLOWED
Due to Road Building

was changed to include only such roads used by the public for not less than seven years, and maintained at public expense. In the highway code of 1937 this was re-enacted, and proper county roads were also declared to be those in use for not less than ten years whether maintained at public expense or not.

RIGHT-OF-WAY COSTS

The record in the county engineer's office discloses that the first deeds for right-of-way purposes were acquired in 1861, but the original papers, which would prove to be very interesting, are not available, probably because not until the 1870's were such documents recorded. From that time up to the present a total of 12,876 deeds has been obtained, covering a land area of 20,541 acres, costing $481,645.12. At that rate the average cost per deed would be approximately $38.00 and per acre about $23.00.

During 1939, in addition to 165 easements, deeds secured and recorded for road purposes, excluding purchases of gravel pits, quarries and other such sites amounted to:

Districts	No. of Deeds	Total App. Area	Total Cost
South District No. 2	81	28.62	$ 346.25
North District No. 3	123	42.93	1,534.36
TOTAL	204	71.56	$1,880.61

Those requiring ten or more were:

South District No. 2:	Old Military Road	29
	South 126th Street	21
	8th Avenue South	14
	Amelia Schewe Road	10
North District No. 3:	10th Avenue N. E.	34
	Gardiner Street	12
	Ashworth Avenue	10

FRANCHISES AND PERMITS

First granted by the territorial legislature in each individual case, the county commissioners gradually were empowered to issue franchises for public utilities, the law providing that none were to be exclusive nor to run for more than fifty years, which is in effect today. What might be termed the very first franchise was that granted by the act of January 27th, 1863 to Joseph Cushman to construct a telegraph line from Vancouver, Washington to British Columbia. The next in 1864 provided for the incorporation of the Seattle-Squak Railroad Company. The following year the legislature authorized H. L. Yesler and C. C. Terry to lay down water pipes in the town of Seattle, which is the first such franchise ever recorded. Other firsts were for gas in 1869 to H. L. Yesler and associates, telephone in 1881 to John M. Kollock, electricity in 1881 to Bailey Gatzert and others, horse-cars in 1883 to David T. Denny and George Kinnear, electric-cars in 1886 to Frank H. Osgood. Then followed applications for electric transportation, transmission lines, water systems, etc., which were in time more and more referred to the county engineer's office for recommendation, this eventually becoming one of the functions of the right-of-way department.

From 1881 when the county commissioners began granting them, and up to the end of 1939 there were 261 franchises and 14,555 permits issued. Collections of fees for permits from 1917 to date amounted to $27,539.38 or an average of approximately $1,200.00 per year. Issued during 1939 were:

Type	Franchises	Permits	Income From Permits
Pole Line			
Light and Power	....	1013	$3,039.00
Telephone	....	56	168.00
Gas	....	14	14.00
Water	8	.....	.....
Water Connections	....	49	73.50
Water Service	....	730	365.00
Culvert	....	106	.....
House Moving	....	40	.....
Miscellaneous	....	7	.....
TOTAL	8	2015	$3,659.50

INSPECTIONS

Most of the inspections were made of work performed in connection with permits issued by this office. Again the watchfulness of this service resulted in no accidents being reported during the entire year.

Type of Inspection	District No. 2	District No. 3	Total
Permits—All kinds	1209	806	2015
Water Districts	467	312	779
Complaints—Drainage	109	84	193
Encroachments	19	21	40
Health Conditions	11	28	39
Miscellaneous	37	76	113
TOTAL	1852	1327	3179

VACATIONS

Early legislation dealt with the procedure necessary to authorize vacations, the first one consummated being approved by the county commissioners in 1858 on application of H. L. Yesler to vacate the alley in Block 1, Boren's Plat, Town of Seattle. Beginning in 1867 it was provided that roads were to be declared vacated which after locating were unopened or unworked for three years, changed to four years in 1869 and five years in 1890, with roads in dedicated plats exempted from such vacation by the 1909 session, even if unused five years. Aside from these compulsory vacations, early procedure called for a petition on the part of ten or twelve of the residents desiring such action, upon which the commissioners appointed three viewers to make a report. By 1902 when the use of viewers was discontinued applications for vacation were referred to the county surveyor for examination, which continues to be the method in effect today as confirmed by the highway code of 1937. This provides that on petition of at least ten freeholders, or on a unanimous resolution of the commissioners, the county road engineer is to survey and report. After a hearing, the commissioners must decide by a unanimous vote to either grant or deny the petition. It is further required that roads authorized but unopened and unused for five years are to be automatically vacated, excepting those dedicated in plats or deeded for road purposes. A further provision permits the state highway director to certify back to commissioners as a county road any portion of a primary state highway no longer needed.

All things considered, there have not been so many vacations over the years. From 1858 to 1939 there were a total number of 714 or about nine per year. For 1939 the record on petitions for vacation has been:

Disposition	South District No. 2	North District No. 3	Total
Granted	18	10	28
Rejected	1	1	2
TOTAL	19	11	30

FLOOD CONTROL

The first legislation relating definitely to the authority of counties to regulate and control the flow of waters to prevent floods was passed in 1921. Prior to that, and as early as 1858 there were various statutes regarding drainage, river improvement, and commercial waterways. Since all these phases as a whole constitute the flood control problem, a review of enactments concerning each subject is essential to the proper understanding of the situation in its entirety.

DRAINAGE LEGISLATION

The first law of any kind concerning drainage or flood control was passed in 1858 and provided for applications to be made to the county commissioners to drain marsh and swamp lands by the construction of ditches to be built by the petitioners, costs to be shared in proportion to benefits. Re-enacted in 1865 the measure was enlarged in 1875 to include drains and watercourses, and to authorize the county commissioners to establish and locate them on acceptance of the report of three viewers as to estimated cost, apportionment of benefits and damages, and length of ditch each person benefitted was to construct. On completion, owners were to maintain in proportion to benefits.

In the 1881 code it was enacted that on petition of two-thirds of the ownership of one body of 300 or more acres of tide, swamp, marsh or overflowed lands, three commissioners were to be elected to supervise the construction of dikes or ditches, to estimate damages and benefits, and to make assessments not only for the cost of the improvement, but for maintenance as well. County commissioners were authorized to divide the area into three or more districts, thus establishing for the first time, organization by districts, and election of district commissoners.

This gradually led to a statute passed on March 20th, 1895 which permitted the constituting of diking districts on petition or five or more inhabitants of the area designated. Elections were to decide the question of establishment and the choice of three diking commissioners, under whose direction construction and maintenance were placed and who, if the majority favored it, were authorized to issue bonds, to be retired by proportionate property assessments. For maintenance purposes assessments were also to be levied. By 1913 provisions were made whereby two diking districts might consolidate if so desired. In 1915 dissolution was also made possible on petition of not less than two-thirds of the landowners possessing at least three-quarters of the area.

In addition to diking, another act passed on March 20th, 1895 authorized the formation of drainage districts in the same manner, with the exception that petitions had to be supported by a majority of the acreage. By legislation enacted in 1907, they could be dissolved in the same way as provided above. Modifications in the process of establishment were brought about in 1913 and 1917, and existing diking and drainage districts instituted under the laws of 1895 were in 1917 permitted to reorganize by majority vote, on petition to the county commissioners by their district officials. The law of 1913, without affecting organizations already in existence, provided for areas to be called drainage *improvement* districts. The county engineer was charged with making surveys, estimate of cost and schedule of benefits and damages, and with two elected supervisors was to constitute a board to construct the system, which the county commissioners were to finance by the sale of warrants or bonds, to be retired by assessments against the property in proportion to benefits. The act passed in 1917 included diking *improvement* districts, and provided for consolidation of two or more diking or drainage districts when the county commissioners considered the move economical. It also decreed a change in management whereby in areas of more than 500 acres the majority could choose to elect three supervisors or have the county engineer act in that capacity. In areas of less than

500 acres the law required the county engineer to assume the duties of supervisor.

By 1923 under the same laws which provided for diking and drainage, sewerage *improvement* districts were added, to be formed in the manner provided, on the basis of a petition of four or more persons. Consolidation might also be ordered by the county commissioners for reasons of economy.

All areas, whether for diking, drainage or sewerage, which took in portions of two or more counties, were permitted to organize into joint districts, under certain conditions laid down by various legislative enactments of 1909, 1921, and 1923.

In 1933, due to the depression, the financing of diking, drainage, diking and drainage districts, and diking and/or drainage improvement districts, was permitted under the provisions of the state reclamation act giving the director of the department of conservation and development the necessary authority to advance money to such districts by appropriation from the state reclamation fund.

In this year too, provision was made for any diking or drainage district formed under the act of March 20th, 1895 and reorganized under legislation of 1917 to hold an election to determine on the inclusion of irrigation in their program and their title, after approval of a petition submitted to the county commissioners by their district officials.

Further clarification of the duties and powers of the officials of all diking, drainage, diking and drainage districts, and diking and /or drainage improvement districts, was the subject of statutes in 1935 and 1939.

RIVER IMPROVEMENT LEGISLATION

Although legislation providing for the financing of river improvements was not passed until 1907, the commissioners proceedings show that as early as 1866 appropriations for such flood control purposes were being made. The first one of record is an amount of $400.00 set aside for work on the Cedar River under the direction of the road supervisor, who then and now is in charge of the expenditure of river improvement funds. In the 1870's much was accomplished on the White River, and by 1875 an act was passed authorizing district supervisors to expend road tax monies where needed to improve channels of sloughs, bays and rivers used as highways in their territory. Road funds continued to be used on the Duwamish, White, Green, Snoqualmie, and Cedar Rivers, and by 1903 to relieve the strain on the road operations, river improvement districts were authorized to be formed in somewhat the same manner as those for drainage purposes excepting that five directors were to be elected.

It does not appear that any such districts were organized, for road monies were still being spent on the various rivers until 1907, when the county commissioners were authorized to levy an annual tax not to exceed one mill, to be called the River Improvement Fund, to be expended in the district where raised. Legislation still in effect grants power to acquire right of way to preserve stream banks and prevent overflow, to construct embankments, to remove log jams, and to straighten channels or dredge new ones.

In the same year some $500.00 was appropriated, to be matched by Pierce County, for preliminary surveys of the White and Stuck River watershed. This was the first action taken by the county authorities, which resulted in the passage of Chapter 54, Laws of 1913, under the provisions of which was formed the existing Inter-County River Improvement Commission of King and Pierce Counties.

COMMERCIAL WATERWAY LEGISLATION

Though drainage and river improvement legislation improved the situation in localized areas and helped conditions along the course of the streams, the discharge of accumulated waters at the outlets furnished quite a problem. The formation of drainage districts with their limited scope was not the answer, and neither could the necessary relief come from the utilization of the small amount of river funds available. The only solution seemed to be the creation of organizations designed to remedy this particular situation. Hence in 1909 a statute was passed enabling the majority of property owners involved to petition the county commissioners for the formation of commercial waterway districts. An election was to determine the question of establishment, at which time three commissioners were to be chosen, to have charge of construction and maintenance. By majority vote bonds were to be authorized for the necessary improvements, to be retired by assessments against the property in proportion to benefits. Districts were to have the power of eminent domain; to straighten, widen or deepen stream channels; to construct canals, locks, dikes or other works to prevent overflow; to acquire right of way by purchase or condemnation; to sell or trade abandoned river beds for other needed property. Under this statute, validated in 1911, two such districts were organized, one for the Duwamish and the other for the Cedar River.

FLOOD CONTROL LEGISLATION

All the measures hitherto enacted were of an independent nature, being the outgrowth of local conditions. A successful attack on the flood menace could only be made as the result of a general cooperative movement with state and federal participation. Very early in the history of the county this appeared to be the aim of the pioneers. In 1855, again in 1858, and many more times thereafter the state legislature memorialized Congress for an appropriation to clear the White and Duwamish Rivers in order to permit navigation at all seasons of the year for 35 to 40 miles from Seattle. Since then, of course, the federal government has been assisting the state and the counties in this manner, and although their interest was always based on navigation, their contribution did much to relieve flood conditions.

Again these were isolated moves in the vast program that seemed essential to the elimination of the problem. Yearly the valleys were inundated, and the worst of the earliest floods occurred in December 1867 when the White, Duwamish, Black and Cedar Rivers overflowed their banks. The water stood seven feet deep. Houses, fences and other public and private property were washed away and the farmers sustained great losses. Alarmed by such havoc, the authorities next year petitioned Congress to empower King County to construct a canal between Lakes Union and Washington, lowering the water in the latter body, and granting the county all lands so reclaimed. The lakes were separated by a narrow neck of land, necessitating a portage between the two. Lake Washington's outlet was through the Cedar and Black Rivers and it was very apparent that flood conditions on those streams would be considerably ameliorated with the lowering of its waters. As early as 1854 Thomas Mercer proposed such a canal. In the 1860's Harvey Pike (son of the pioneer John Pike after whom Pike Street is named), who took up a claim which included the portage, proceeded to dig a canal using pick, shovel and wheelbarrow. Though doomed to failure, this was the first attempt ever made to connect the two lakes. In 1867 the U. S. Army Engineers reported the feasibility of such a canal, confirmed by another federal survey in 1871. Assistance from the United States government was sought but proving fruitless, Seattle citizens held a mass meeting at Yesler Hall in 1879 for the purpose of raising funds. Unsuccessful, Congress was again memorialized in 1883 for an appropriation to build a canal to connect the lakes and also Lake Union with Puget Sound. The first actual work was undertaken in the same year by the Lake Washington Improvement Co., which the year following succeeded in completing the project between the lakes. Continuous agitation resulted in the passage of the Rivers and Harbors act, in 1910, appropriating $2,275,000 for the

federal construction of the locks provided King County built the canal. Work on the locks began in June 1911, and five years later the waters of Salmon Bay were raised, Lake Washington lowered to the level of Lake Union and the canals opened for navigation from Puget Sound to Lake Union, and from that body of water to Lake Washington.

This proved to be the most important individual measure that was executed with the assistance of the United States, which tended to alleviate general flood conditions. For the next ten years no change occurred until in 1921 the first flood control enactment was passed, authorizing counties to regulate and control the flow of waters to prevent floods. But it was not until 1933 that a real flood control policy eventuated.

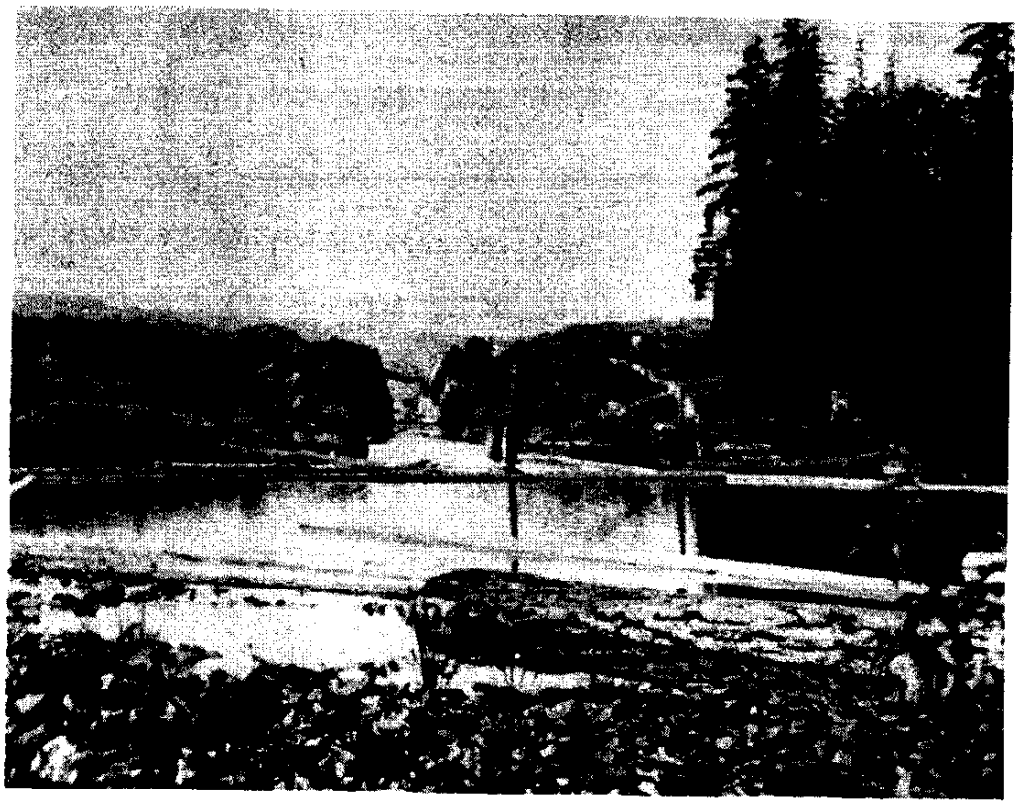
Legislation that year gave the county commissioners authority to request the state supervisor of hydraulics to construct the necessary works, if there were no objection on the part of the majority of property owners invoived the cost to be paid by bonds or warrants to be retired by property assessments. On completion of the works, county and city were to maintain them jointly in proportion to the original cost.

In 1935 three statutes were enacted, the first of which provided a state policy for flood control under the director of conservation and development ,with state participation in projects only as their interest might be affected. and with permission for flood control districts to contract for the maintenance of existing works with officials of diking, drainage, or waterway districts that might be located within such areas. Another law gave the state regulatory power over all waters within the state through flood control zones to be designated by the supervisor of hydraulics, who was also to have the supervision over construction, operation and maintenance of all flood control works, through issuance of orders and permits. A third enactment provided for the establishment of flood control districts for the whole or a part of a stream system, on petition of not less than ten residents, filed with the department of conservation and development. On approval of the project a commission was created consisting of the conservation and development director, the state supervisor of hydraulics, the state highway director, member of the state planning council and a resident of the region concerned. This commission was to call an election, which if favorable caused the establishment of the district, the powers and the duties of which were to construct and operate flood control works, (subject to the state director's approval) financing them by a general obligation bond issue if an election so decided; to acquire land by purchase or condemnation; to levy an annual tax up to two mills, and up to five mills if by majority vote. District directors were to be ex-officio county commissioners.

In 1937 the last mentioned act was modified in these particulars: Petition to form the district required 50 per cent or more of the acreage; the commission was to consist of the state supervisor of hydraulics, a professional hydraulics engineer, the county agricultural agent, and two residents of the regions concerned; taxing power withdrawn and bonds made payable by means of assessments apportioned according to benefits including public lands, state highways, etc.; three district directors to be elected; empowered to enter into contract with the state or the federal government for the construction and management of necessary flood control works.

PROPOSED LEGISLATION

Along the lines of the legislation outlined above, three measures were prepared under the direction of the Puget Sound Flood Control Council whose membership represents the University of Washington, the State Department of Conservation and Development, King, Snohomish, Whatcom, Skagit, Pierce, Thurston, Lewis, and Clickitat Counties, and the Inter-County River Improvement Commission (King and Pierce Counties). Presented to the last session of the legislature, they failed of



LAKE WASHINGTON CANAL
Built by Private Enterprise in 1883

enactment, but they will again be brought up during the coming year. These proposed acts are:

Repeal of River Improvement District Act: Repealing the inoperative river improvement district law passed in 1905, providing that fifty or more land owners might organize and tax themselves to control flood conditions on a river.

Amendment of River Improvement Act: Amending the present county river improvement law, and changing the name "River Improvement Fund" to "Flood Control Fund," to identify the program more closely with flood control operations. Within that fund an account is set up for maintenance, in harmony with the maintenance act described below. Powers of eminent domain are vested in the commissioners. Retained in the new act is the provision as regards river patrol, but under a state system and policy.

Maintenance Act: Setting up a combined state and local maintenance policy, and providing for systematic and orderly maintenance under the county engineer, supervised by the state, with their contribution of a small portion of the costs. Creating a division of flood control within the state department of conservation and development, which move is warranted by the importance of such operations in the welfare of the different communities.

ZONES AND DISTRICTS

As a result of legislation in former years, many drainage and commercial waterway districts have been organized, and flood control zones created, as follows:

DRAINAGE DISTRICTS

(Organized under Chapter 115, Laws of 1895)

No.	Location	Date Established	Approximate Acreage	Remarks
1	White River Valley (Renton Jct.-Kent)	Oct. 14, 1895	8,320	Operating
2	Vicinity of O'Brien	Dec. 12, 1904	448	Operating
3	Hollywood-Sammamish	Jan. 30, 1911	410	Operating
4	Issaquah-Sammamish	Dec. 6, 1915	928	Operating
5	Vicinity of Enumclaw	Feb. 28, 1916	1,200	Operating
6	Vicinity of Boise Creek, Enumclaw	Aug. 14, 1916	1.800	Operating
7	Cherry Valley	Aug. 12, 1918	850	Operating
8	Algona-Pacific City	July 15, 1919	.....	Abandoned 3/18/24
9	Kenmore-Hollywood	.....	.....	Not organized
10	Duvall	Feb. 9, 1920	.....	Abandoned 3/19/23
11	Auburn-Kent	.....	.....	Not organized
12	Vicinity of Bellevue	Mar. 31, 1919	477	Operating
13	Vicinity of Enumclaw	June 16, 1921	800	Operating
14	Vicinity of Snoqualmie	Oct. 22, 1934	300	Operating

COMMERCIAL WATERWAY DISTRICTS

(Organized under Chapter 8, Laws of 1909)
(Validated by Chapter 10, Laws of 1911)

Number	Location	Date Established	Approximate Acreage	Remarks
1	Duwamish River	Feb. 28, 1910	40	Operating
2	Cedar River	Dec. 5, 1910	80	Operating

FLOOD CONTROL ZONES

(Established under authority of Chapter 159, Laws of 1935)

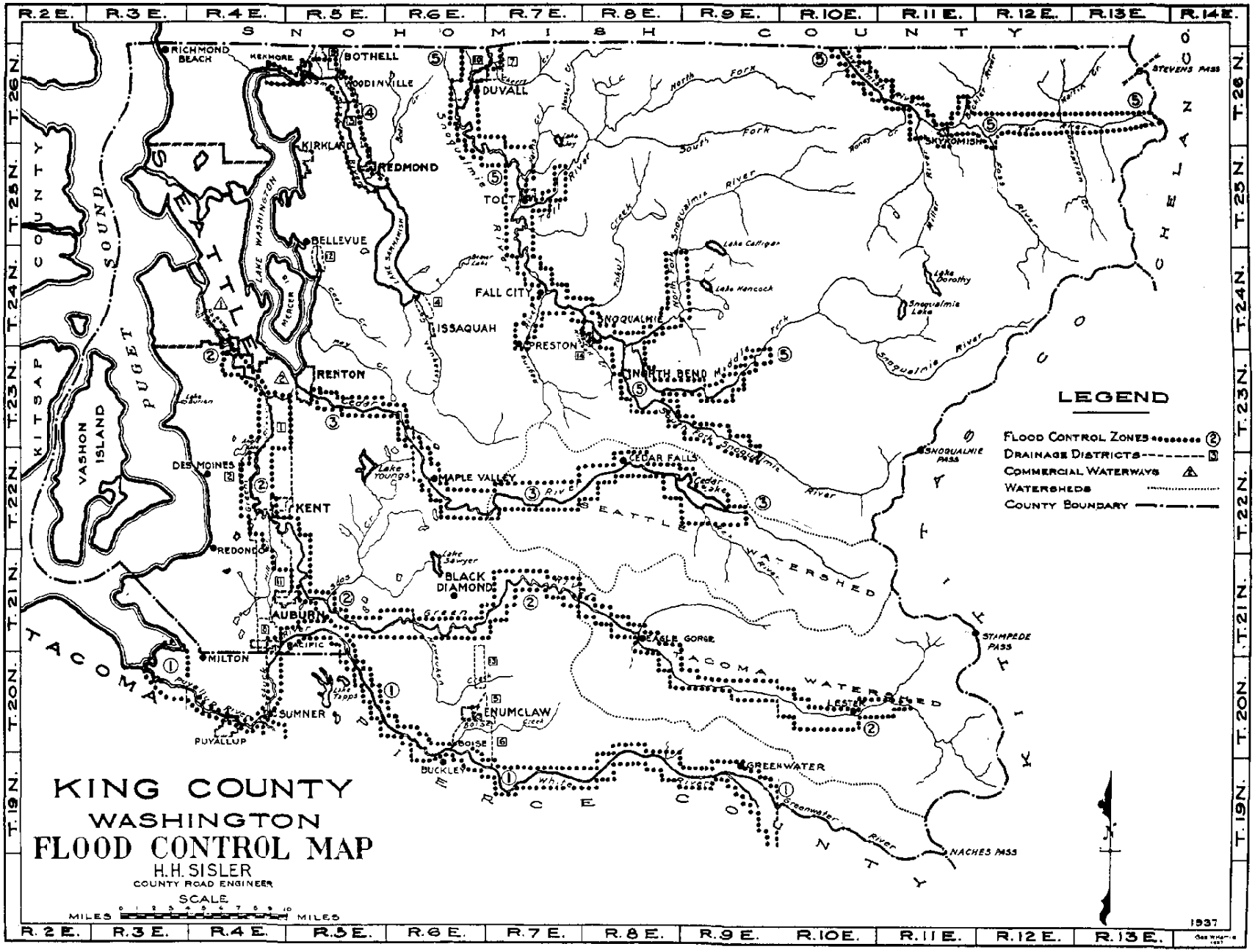
Number	Name	Counties Affected	Principal Rivers
1	Puyallup River	King-Pierce	Puyallup, White, Stuck, Carbon, Greenwater
2	Green River	King	Green, Duwamish, Black
3	Cedar River	King	Cedar
4	Sammamish R.	King	Sammamish
5	Snohomish R.	King-Snohomish	Snohomish, Snoqualmie, Skykomish, Raging, Tolt, Miller, Beckler, Tye, Pilchuck, Sultan

INTER-COUNTY COMMISSIONS

(Formed pursuant to Chapter 54, Laws of 1913)

Name	Year Established	Corresponding to
Inter-County River Improvement Commission	1914	Flood Control Zone No. 1
Inter-County Flood Control Commission	1937	Flood Control Zone No. 5

An attempt was made under Chapter 160, Laws of 1935, to organize a flood control district for the Sammamish Basin, replacing Drainage District No. 9, which had remained inoperative. An injunction secured by certain interests, prevented its formation. Districts in other parts of King County have not as yet been proposed.


R.2E. R.3E. R.4E. R.5E. R.6E. R.7E. R.8E. R.9E. R.10E. R.11E. R.12E. R.13E. R.14E.
T.26N. T.25N. T.24N. T.23N. T.22N. T.21N. T.20N. T.19N.
SNOHOMISH COUNTY
KING COUNTY
KITSAP COUNTY
PIERCE COUNTY
YAKIMA COUNTY
RICHMOND BEACH
KENMORE
BOTHELL
WOODINVILLE
DUVALL
KIRKLAND
REDMOND
SEATTLE
LAKE WASHINGTON
PUGET SOUND
VASHON ISLAND
BELLEVUE
TOLT
FALL CITY
ISSAQUAH
SNOQUALMIE
PRESTON
NORTH BEND
RENTON
DES MOINES
KENT
MAPLE VALLEY
CEDAR FALLS
REDONDO
BLACK DIAMOND
AUBURN
MILTON
SUMNER
PUYALLUP
ENUMCLAW
BUCKLEY
GREENWATER
SKYKOMISH
STEVENS PASS
SNOQUALMIE PASS
STAMPEDE PASS
NACHES PASS
SEATTLE WATERSHED
TACOMA WATERSHED
LAKE SAMMAMISH
LAKE YOUNGS
LAKE SAWYER
LAKE CALLIGAN
LAKE HANCOCK
LAKE DOROTHY
SNOQUALMIE LAKE
LEGEND
FLOOD CONTROL ZONES
DRAINAGE DISTRICTS
COMMERCIAL WATERWAYS
WATERSHEDS
COUNTY BOUNDARY
KING COUNTY
WASHINGTON
FLOOD CONTROL MAP
H.H. SISLER
COUNTY ROAD ENGINEER
SCALE
MILES
1937

KING COUNTY FLOOD CONTROL EXPENDITURES

The figures have been compiled from the county auditor's annual reports, including bond and warrant retirement.

Purpose	Years	Amount	Total
Drainage District No. 1	1895-1939	$ 179,432.16	
2	1906-1939	58,938.77	
3	1912-1939	85,380.47	
4	1916-1939	33,646.99	
5	1916-1939	60,747.87	
6	1916-1939	108,443.56	
7	1919-1939	96,958.84	
12	1919-1939	74,377.14	
13	1921-1937	28,444.12	
14	1935-1939	1,409.45	
General	1918 1933	134,684.91	
Total Drainage Districts			$ 862,464.28
Water District No. 1	1911-1939	5,240,052.56	
2	1911-1939	476,945.80	
East Waterway No. 2	1913-1919	3,383,433.22	
Duwamish Waterway	1923-24 1931-33	154,408.45	
Total Waterways			9,254,840.03
River Improvement—Districts 2 and 3	1907-1939	2,486,201.07	
Inter-County River Improvement	1914-1939	2,192,227.05	
Total River Improvement Funds			4,678,428.12
Canals—Government Canal Fund	1895-1909	262,971.77	
Lake Washington Canal	1901-1919	817,155.46	
Total Canals			1,080,127.23
TOTAL FLOOD CONTROL EXPENDITURES			$15,875,859.66
AVERAGE ANNUAL FLOOD CONTROL EXPENDITURES			$ 975,153.28

SNOQUALMIE RIVER
Bank Protection Between Fall City and Tolt

SUMMARY OF FLOOD DAMAGES

In the tabulation listed below information was taken from every report which contained figures as to damages and losses. It will be seen that many of the sums stated are at variance with each other, and for that reason no general annual total could be ascertained with any degree of accuracy. However, a summation of such amounts as appear, covering an average of about 20 years, reveals the annual flood damages for all classifications in all flooded areas in King County to be about $645,000. This sum capitalized at 4 per cent, would fix the maximum limit of expenditures for flood control protection at about $16 000,000 for 20 years, including the annual cost of operation and maintenance. If interest rates were greater than 4 per cent, the limit of expenditures would be reduced correspondingly. Since King County's total outlay for flood control purposes was approximately $8,000,000 for the past 21 years, it will be seen that this is far below the capitalized sum of $16,000,000. It therefore proves that further flood control operations on the part of King County with the assistance of the Federal Government are economically justified and warranted.

Flood Dates	Report	Agriculture	Roads & Bridges	Towns	Railroads	Industries	Miscellaneous	Total
	ZONE NO. 1—PUYALLUP RIVER							
(1) 1917-19	Document 153 ...	(Pierce Co.)			.....	.....	.....	$ 389,260
(2) Dec. '33	King Co. Pl. Com	$ 18,938	(White R)		.....	.....	.....	18,938
	ZONE NO. 2 GREEN RIVER							
(3) 1917	Document 286 ...	.....	.....	.....	.....	.....	.....	$1,000,000
(3) Feb. '32	Document 286 ...	.....	.....	.....	.....	.....	.....	400,000
Dec. '33	C. E. Thomas	$650,000	$162,000	$68,000	.....	.....	.....	880,000
(2) Dec. '33	King Co. Pl. Com	711,818	52,670	13,000	.....	$138,055	$12,600	928,143
Annual	Document 286	59,000	43,000	10,000	.....	.....	24,000	136,000
Annual	Document 377 ...	74,000	43,000	13,000	.....	.....	38,000	168,000
(4) Annual	King Co. Eng. ...	.....	67,200	.....	.....	.....	.....	342,200
	ZONE NO. 3—CEDAR RIVER							
(5) Dec. '33	C. E. Thomas	$ 25,000	$ 75,000	.....	$40,000	.....	.....	$ 140,000
(6) Dec. '33	C. E. Thomas	100,000	496,000	.....	75,000	.....	.....	671,000
(2) Dec. '33	King Co. Pl. Com	71,320	30,400	.....	.....	134,090	.....	235,810
	ZONE NO. 4—SAMMAMISH RIVER							
(2) Dec. '33	King Co. Pl. Com	$194,879	(Includes Issaquah Creek)			.....	.....	$ 194,879
Dec. '33	King Co. Eng.	500,000	$280,000	.....	.....	.....	.....	780,000
	ZONE NO. 5—SNOHOMISH RIVER							
(7) Dec. '33	C. E. Thomas	$249,600	$ 55,000	$25,000	.....	$ 20,000	.....	$ 349,600
(8) Dec. '33	Inter-Co. Flood Control. Com. ...	724,591	.....	.....	.....	.....	.....	724,591
(9) 1933	" " "	381,333	.....	.....	.....	.....	.....	381,333
(9) 1934	" " "	383,466	.....	.....	.....	.....	.....	383,466
(10) Dec. '33	King Co. Pl. Com	255,060	57,725	2,000	$69,250	6,000	.....	390,035
(11) Annual	Inter-Co. Flood Control Com. ...	.....	38,190	.....	.....	94,300	.....	132,490
(7) Annual	King Co. Pl. Com	50,000	.....	.....	.....	.....	.....	50,000

Notes:

(1) Pierce County losses of industries and railroads combined.

(2) King County Planning Commission Report—July 1935 to July 1938. Based on survey covering 98 square miles containing about 2,000 parcels of land, and interviewing about 1,500 property owners in Zones 2-3-4-5. Loss for all zones equals 16.4 per cent of total state damage.

(3) All losses not segregated.

(4) Roads & Bridges $67,200, balance not specified.

(5) Engineer C. E. Thomas' own estimate.

(6) Estimate of King Co. Supervisor of District No. 2.

(7) Losses for Snoqualmie Valley in King County.

(8) Divided as follows:
King County—Snoqualmie River $255,060.
Snohomish County—Snohomish River $230,023;
Skykomish River $145,836; Snoqualmie River $61,315;
Pilchuck River $32,357.

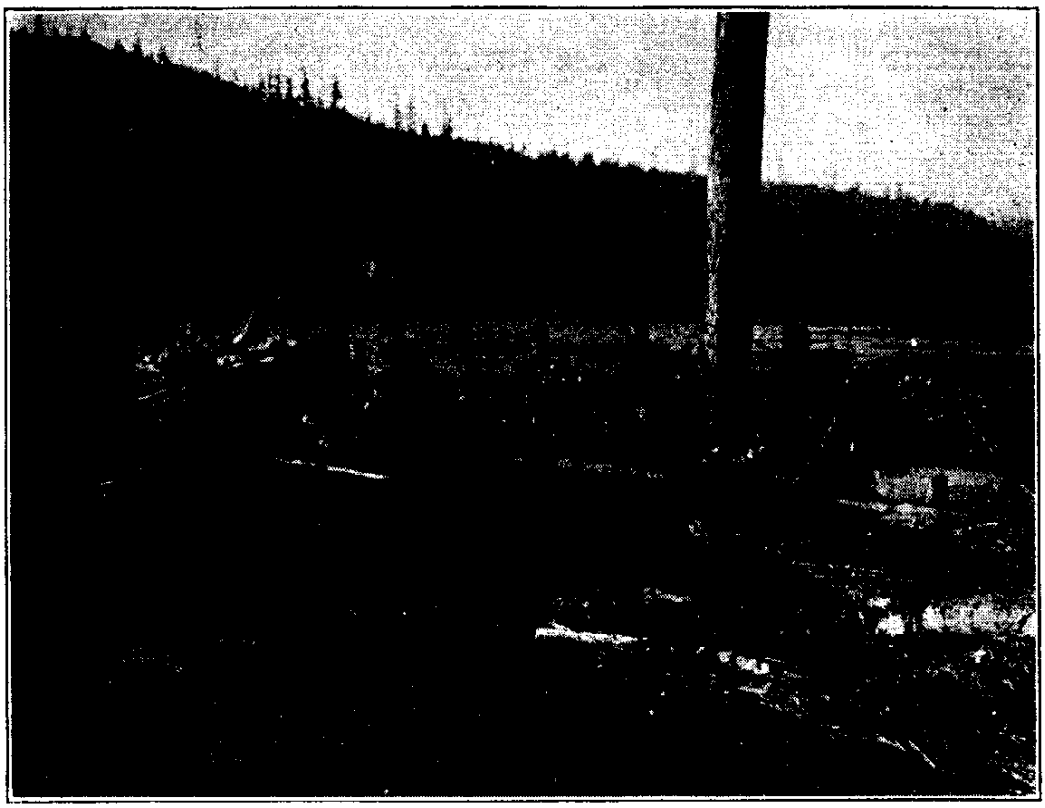
(9) Statement of Snohomish Flood Control Committee.

(10) King County Planning Commission Report—July 1935 to July 1938, for Snoqualmie Valley.

(11) Statement of Flood Control Committee, Everett Chamber of Commerce.

FLOOD DAMAGES

RAGING RIVER
Showing loss of valuable top soil



SNOQUALMIE RIVER
Debris deposited on road near Tolt

FLOOD CONTROL OPERATIONS

ZONE NO. 1

Boise Creek: This is a tributary of the White River one mile east of Enumclaw. Work was done during 1939, driving piles, planking and rip-rap to the amount of $2,301.27 from river improvement funds.

ZONE NO. 2

Green River: The survey of the U. S. Army Engineers was completed this year and their report has already been forwarded to Washington, D. C.

Green River: From river improvement funds approximately one mile of dredging was accomplished, included in the projects listed below:

Project No.	Location	Nature	Cost
R.I.C. 1	Titus Pit and River Road south	Fall trees, powder holes for blasting, gravel bank, fill on River Road	$ 4,604.77
2	Brennan Farm, at Thomas on west bank	Cut brush, deepen channel, protect river bank	4,723.61
4	Ike Evans Farm, at Green River Road	Remove gravel bar, widen channel, protect Green River Road	3,570.26
5	Green River Road, at Ike Evans Farm	Fall trees, cut brush, fill and widen road, install 18 in culvert	13,677.77
6	Hamilton Slough	Cut brush, widen and deepen channel, protect river bank	3,513.93
7	Winters Farm, north of Hamilton Slough	Widen and deepen channel, protect river bank and Green River Rd	5,883.60
8	Stanley Egan Farm	Cut and burn brush, remove bar and island to widen river, deepen channel, protect river bank	2,302.58
11	Green River Road—Titus Pit to Porter Bridge	Slash and burn brush on road and river bank	2,921.99
12	South of Titus Pit & River Road near Evans Farm	Snag river, dragline to protect the River Road	10,324.92
13	East of Ely Packing Co.	Drive and plank 250 piles, dragline	734.40
16	O'Brien Bridge to Orillia	Clear brush at ditches	1,100.75
R.I.M. 1 & 3	Green River	Maintenance	4,456.27
		TOTAL	$ 57,814.85

Burns Creek: The work planned in 1938 was completed this year, from 8th Avenue South, east to the Duwamish River. The total cost was $22,252.83 with the W. P. A. contributing $9,443.90 and the county furnishing $7,114.58 from river improvement funds under Project R. I. C. No. 3, and $5,694.35 as part of County Road Project E-34.

Newauken Creek: Project R. I. C. No. 9 was set up for the building of a bulkhead with piles and planks on the Selleck Road one mile east of the Enumclaw-Black Diamond Road. The cost from river improvement funds was $4,590.78.

ZONE NO. 3

Cedar River: The U. S. Army Engineer's survey is practically complete, with a small amount of field work still to be done.

Cedar River: At Maplewood Farms operations included dragline to remove bars, deepen and widen the channel to protect the river bank, the Pacific Coast Railway and the state highway, also removing stumps and logs. As Project R. I. C. No. 15, there was $2,728.21 expended from river improvement funds.

OPERATIONS ON CEDAR RIVER
Dragline Crews Working at Elliott

ZONE NO. 4

Sammamish River: In the 1938 report the situation was fully described, and mention was made of a survey by the U. S. Army Engineers. Now completed, a full report has been sent to the authorities in Washington, D. C.

Sammamish River: Concerning the W. P. A. project set up in 1938 under No. O. P.-665-93-2-378, formerly No. 17-5-1466, which contemplates the correction of the lower two and one-half miles of the stream, from Lake Washington to Bothell, at an estimated cost of $189,430.00 of which $118,534.00 was to be supplied by the federal government, and $70,896.00 from county funds, the local W. P. A. authorities are unable to furnish the skilled labor required for dredge operations, so that work has not started. Expenditures from the engineer's budget have been $181.06 in 1939.

The county engineer's office has devoloped a plan for the entire alleviation of the flood menace, by the widening and straightening of the present channel, taking advantage of the storage possibilities of Lake Sammamish without the use of a dam or any obstruction in the outlet to the lake. and without raising its present flood level. For the entire project from Lake Washington to Lake Sammamish the detailed estimated cost would be:

3,205,000 cubic yards excavation.....	at	$ .20	$641,000.00	
4 Highway Bridges.....	"	12,000.00	48,000.00	
12 Single Lane Cable Bridges.....	"	3,000.00	36,000.00	
40,000 cubic yards Rock Rip-rap.....	"	2.00	80,000.00	
Trimming and Grading.....			32,000.00	
Right-of-way			13,000.00	$850.000.00

Issaquah Creek (East Fork): The project set up last year under W. P. A. No. O. P. 665-93-2-327 for an estimated cost of $17,751.00 of which the county's share is $4,781.00, was rescinded on September 18th, 1939 both because of a general shutdown of W. P. A. operations and because no labor was available at that time in the vicinity of the job. Survey and working plans were completed in 1939 by the county engineer's office, at an expenditure of $504.90 from their budget.

Issaquah Creek: Two small jobs were done in 1939 from river improvement funds. Project R. I. No. 23 at Dr. Hillery's place called for the removal of a log jam to clear the channel at a cost of $65.42, and Project R. I. No. 25 for sloping and rip-rap at Biles place to cost $198.72, or a total of $264.13.

Cottage Lake: This proposed drainage project necessitated engineering to the extent of $372.06 from the engineer's budget.

ZONE NO. 5

Snohomish-Snoqualmie Rivers: The survey of the U. S. Army Engineers has been accomplished, but the final report has not yet been forwarded to Washington, D.C.

Snoqualmie River Area: Project O. P. 65-93-911 continued operations as a W. P. A. job until shut down, on Oct. 31st, 1939. The county, however, proceeded with work on the various portions at locations on the Snoqualmie River, the three forks thereof, Raging River, Tolt River, and the Fall City and North Bend, (Colingswood) Quarries. Up to date the total expenditures have been $369,778.00, of which the W. P. A. contributed $213,614.00, the state $4,227.00 and the county $151,937.00. During 1939 improvements were made along the Snoqualmie River which include placing of 25,000 cubic yards of rock rip-rap by the W. P. A., being equivalent to 5.000 linear feet of bank protection. County crews placed brush along some 5 miles of bank. On the South Fork a crew of five men with one caterpillar, were engaged in removing jams for a period of three months. Another crew of five men with a caterpillar were engaged in dredging for seven months. About 40,000 cubic yards were excavated from the river channel, being approximately 5,000 linear feet of gravel bars removed. On the Middle Fork, a crew of four men with a caterpillar accomplished 1,500 linear feet of dredging, or 12,000 cubic yards. On the Raging River, operations which were begun in 1938 resulted in the deepening, widening and straightening of the lower one and one-half miles of the stream. In the course of the work approximately 125,000 cubic yards of gravel was taken from the river bed. About 29,000 cubic yards of rock rip-rap was placed, being approximately two cubic yards per linear foot. The total length of channel correction was 7,400 linear feet, the cost of which was about $50,975.86, with federal assistance, or approximately $6.88 per foot.

RAGING RIVER PROJECT
Fall City Quarry

RAGING RIVER OPERATIONS

D-8 Caterpillar
Operating Upstream

Dragline Operations
From Bridge

Project Completed
East of Fall City
Bridge

From river improvement funds, the following projects were completed, many being included in the outline of work performed, as related above.

Project Number	Location	Nature	Cost
R.I.C. 1	South Fork Snoqualmie River (at Cedar Falls Bridge, Maloney's Grove, Bridge No. 405A, and Sunset Highway)	Remove log jams, dredge channel	$10,453.30
2	North Fork Snoqualmie River		792.54
3	Raging River (at bridge No. 615A)	Clear right of way, remove bars, straighten channel and rip-rap banks	35,644.04
4	Middle Fork Snoqualmie River (at Norman's place)	Remove log jams, dredge and straighten channel	2,812.64
5	Colingswood Quarry		28.65
6	Snoqualmie River (at Peterson's and Colson's places)	Slope and bank rip-rap	5,097.80
7	Beaver Creek	Clear brush & debris, rip-rap channel	164.24
8	Tolt River Dike		1,002.37
9	Fall City Quarry	Install pump & pipe line for sluicing	1,562.34
10	Snoqualmie River (at Peterson's place)	Slope and rock rip-rap	4,162.52
11	Snoqualmie Flood Gates (at Vincent)	Remove debris, repair seals and fit up pump	115.81
12	Patterson Creek	Clear log jams, remove abandoned bridge No. 927B	126.99
13	Snoqualmie River (at Carnation Farms)	Slope and rip-rap	627.14
14	Snoqualmie River (at Ford's place)	Slope and rip-rap	359.38
15	Snoqualmie River (at Davidson's place)	Slope and rip-rap	2,568.05
16	Snoqualmie River (at Sato's place)	Slope and rip-rap	1,806.17
17	Snoqualmie River (at Westman's place)	Slope and rip-rap	2,245.47
18	Raging River (at Samuelson's place)	Cut brush and danger trees, remove log jam, enlarge channel and rip-rap	811.11
19	Snoqualmie River (at mouth of Raging River)	Remove gravel bar, rock rip-rap the banks	8,334.32
20	Falls City Powder Magazine	Materials only, WPA labor	266.05
21	Snoqualmie River (at Guptil's place)	Slope and rip-rap	2,991.41
22	Snoqualmie River (at Alexander's place)	Gravel roadway, slope and rip-rap	500.19
26	North Bend Quarry	Shooting test holes	22.71
28	Snoqualmie River (at Bulb Farm)	Construct rock dike	326.91
30	Snoqualmie River (at Adair's place)	Construct rock dike	673.52
RIM 1	Snoqualmie River (between Tolt and County line)	Cut brush and remove danger trees	503.23
2	Snoqualmie River (at Adair's place)	Rip-rap bank	1,181.97
3	Snoqualmie River (at Vincent)	Repair flood gate	31.00
		TOTAL	$ 85,211.87

Engineering from the county engineer's current expense budget called for the expenditure of $2,506.16 on the Raging River, $1,746.55 on the Snoqualmie River and $2,500.59 on the Tolt River, or a total of $6,753.30.

MISCELLANEOUS

Lake Burien: Set up in the latter part of 1938, it was completed this year as river improvement project R. I. C. No. 14, with the county contributing $1,635.25, and the W. P. A. the balance.

River Improvement Projects: All in North District No. 3, the following projects from river improvement funds, not in any of the flood control zones enumerated above, have been done:

Project Number	Location	Nature	Cost
RIC 29	Lyons Creek	Slope and rip-rap	$ 308.61
31	25th NE at E. 175th St.	Place tiling at intersection	325.43
32	E. 179th St. at Meridian	Place tiling at street end	245.89
33	E. 179th St. at 1st NE	Place tiling	105.71
34	Monohon Road	Construct ditch	234.85
35	Durland Drive	Back-fill washout	291.98
36	15th NE at E. 117th St.	Place tiling at corner	20.33
37	23rd NE at E. 70th St.	Place tiling	204.34
38	E. 147th St. at 35th NE	Place tiling	83.37
39	Linden Ave. at N. 90th St.	Place tiling	26.43
40	39th NE at E. 135th St.	Install tiling and catch basin	36.60
41	Haller Lake District	Rip-rap at intersections and stock-pile rock	653.86
42	68th NE at NE 183rd St.	Install tiling	151.21
43	View Ave. (W. 95th St.-Alvin Pl.)	Fill in slide and gravel	285.21
45	E. 107th St. at 21st NE	Install tiling and catch basin	40.69
48	Rd. No. 1079, Factoria Rd.	Replace wooden culvert with tile	37.60
RIM 5	Solberg Road	Ditching	408.93
		TOTAL	$ 3,461.04

PROPOSED FOR 1940

Snoqualmie River: Work planned on the existing project which will continue to operate with W. P. A. assistance, includes 29,000 cubic yards of rock rip-rap equalling approximately 5,000 linear feet of bank protection, and nineteen miles of snag removal from Fall City to the county line.

Raging River: To protect the town of Preston and to eliminate the continual erosion of gravel banks which forms a deposit in the lower reaches of the river, channel correction is proposed for one and one-half miles upstream from Preston.

Tolt River: With the county and the W. P.A. cooperating, the lower three miles of permanent channel construction will be done, necessitating 40,000 cubic yards of excavation and 20,000 cubic yards of rip-rap. From the mouth of the river to the forks seven miles of snagging and jam removal work will be accomplished.

Snoqualmie—South & Middle Forks: Surveys and plans are being made for the proposed diversion of flood waters from the South Fork to the Middle Fork of the Snoqualmie River.

SEWER AND DRAINAGE DISTRICTS

As pointed out in last year's report the growth and development of the rural districts in King County have made it essential that they be provided with the necessary sanitary utilities. Hundred of thousands of people live in the suburban areas adjacent to Seattle, known as the "Metropolitan District." It would seem that some arrangements should be made to enable them to enjoy such needed benefits in much the same manner as the road system has been developed. Without the motor vehicle or gas tax, the finances of the state and the counties would have been insufficient to carry on the program of highways as they exist today. For the same reason, without some enabling legislation, it will be impossible to properly solve the problem of sanitation, which is today more imperative than ever before, due to the increasing trend of population to the suburbs.

PROPOSED LEGISLATION

Under the present laws the only means of financing the construction of sewer and drainage systems is by direct assessments against the property benefitted. Constituting a lien, this method tends to retard the growth and development of the community. A more satisfactory way to achieve the purpose is by the passage of what is generally known as the "Sewer Rental Law," which provides that payment for the improvements be made by those actually receiving the benefits, by means of rentals earned in the operation of the system. A further step in the right direction would be the creation of a "Metropolitan Sanitation Commission," providing for the consolidation of all sewer and drainage districts under the county commissioners so as to eliminate duplication and waste.

Demands on the part of residents of suburban localities for a correction of conditions caused the Board of King County Commissioners in 1938 to instruct the county engineer to draft suitable legislation. After months of study, and the compilation of data from other states, two measures were prepared (one for counties, the other for cities), based on laws in effect in thirty-five states and permitting the sale of revenue bonds for the financing of such districts. Meeting the requirements of the P. W. A. as to self-liquidating projects much assistance could be obtained from the federal government.

The proposed legislation for counties provides for the cost of construction, operation and maintenance of sewer and drainage districts, to be paid by revenues produced, preliminary costs, prior to establishment by majority vote to be covered by a general tax on the district. Drainage of state and county road systems would be paid out of the motor vehicle fund. To avoid haphazard design and construction, the county engineer would pass on engineering plans before contracts were awarded. There would be no assessments or taxes, except for preliminary expenses as mentioned above. Once the system was in operation, the use of private means of disposal would become unlawful, and all improved property would be required to utilize the service, paying a fee therefor. Unimproved areas would pay no fee until improved and connected with the system. Fees would be determined by the sewer commissioners to be elected by the district, and would be used to retire bonds issued by majority vote to finance construction.

The other proposed measure applies to all incorporated cities and towns. It broadens the 1931 statute which now refers only to fourth class communities, to include all classes. It permits two financial methods—one for the issuance of general bonds and the other for revenue bonds, and under either, fees would be charged for sewer service. Furthermore it provides for consolidation of city sewerage districts with those in counties adjacent thereto.

These measures were submitted to the legislature but failed to pass. Another attempt will be made at the next session, which it is hoped will result in success.

SEWER AND DRAINAGE IN NORTH DISTRICT NO. 3

Due to the fact that some areas tend to drain into the City of Seattle, whereas others find their natural outlet in the opposite direction, two methods of handling the problem in the northern suburban territory have been evolved:

1. Connection with the City of Seattle system.
2. Formation of sewer and drainage districts.

Sewer Connections With Seattle System

Fortunately the north trunk sewer system of Seattle has sufficient capacity to accommodate county areas immediately adjoining, and in some cases even the lateral sewers have been designed to take care of a limited number of privately organized systems. Connection may be made on payment of a sum equivalent to the amount previously assessed for trunk sewers on a like area within the municipality, (generally about 9½ mills per square foot), in consideration of which the city maintains the community system.

Sewers built under these conditions include:

32nd Ave. N. E. (E. 70th to E. 65th Sts.)—completed in 1938
31st Ave. N. E. (E. 70th to E. 65th Sts.)— " " 1939
30th Ave. N. E. (E. 70th to E. 65th Sts.)— " " 1939

The county furnished the engineering and supervision of these projects and the W. P. A. supplied the labor.

Sewer and Drainage Districts

During 1939 two districts were established, being the first of this nature in King County to be ratified by the people. There is a growing demand for this facility throughout the thickly populated areas near Seattle, and it is quite likely that next year will see the institution of more such districts.

North Beach District No. 2. Officially known as Sewerage and Drainage Improvement District No. 2 of King County, the general boundaries are West 100th Street on the north, West 85th Street on the south, the Olympic Golf Course and 15th Avenue N. W. on the east, and 31st Avenue N.W. on the west, excluding certain portions where the terrain was considered too rugged for building purposes. On establishment of the district, the county commissioners appointed as special engineers the Hostmark Engineering Company, instructing the county engineer to assist in the preparation of plans for the improvement. Surveys and working plans were prepared in his office, and the cost of this work, $3,184.00 is to be refunded to the county from the fee paid to the special engineers. The total estimated cost of the project is $210,226.00, of which $152,462.00 is to be furnished by the W. P. A., the balance to be borne by the property owners of the district.

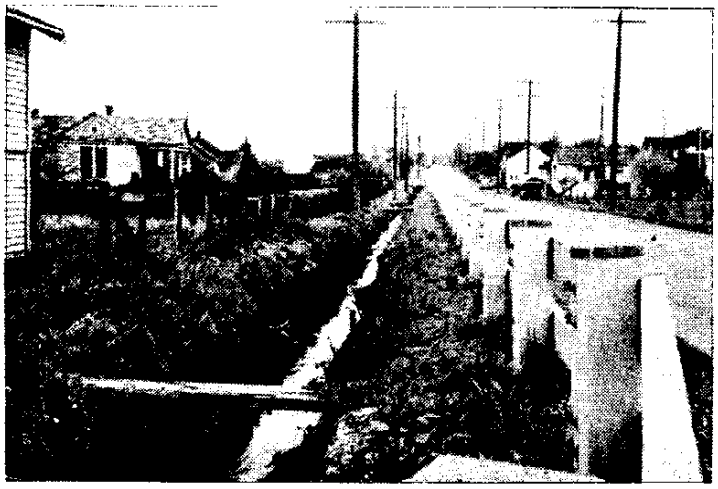
Richmond Beach District No. 3. Officially known as Sewerage and Drainage Improvement District No. 3 of King County, it comprises an area of about eighty acres on the shores of Puget Sound about twelve miles north of Seattle. In accordance with the law the county commissioners appointed the county engineer as special engineer and supervisor of the district. Plans have been prepared and a project proposal has been submitted to the W. P. A. for federal approval, which

appears to be certain. The estimated cost is $92,000.00 of which amount the W. P. A. has been asked to contribute $67,000.00 in labor, the balance being furnished by the district. Out of county engineer funds $1,553.90 has been spent in 1939.

Oaklake District. The boundaries as originally proposed were North 120th Street on the north, North 85th Street on the south, Fremont Avenue on the west and Meridian Avenue on the east. A study of the proposed improvement was made during 1939 at a cost of $219.59 from engineer funds, and it was found that while the need for sewerage and drainage was great the natural outlet was into Seattle's trunk sewer at Green Lake, which, however, could not be utilized because at present there is no state law authorizing the city to deal with an organized sewerage and drainage district in the county. Hence the only way would be to provide artificial means by tunneling from Aurora to Greenwood Avenue, diverting the Oak Lake drainage to Pipers Canyon officially named in 1936 as Sewerage and Drainage Improvement District No. 1, but never formally organized due to lack of a majority in favor of it. Attempts are now being made on the part of certain residents of both regions to promote the formation of one large district to cover the entire area, and their effort appears promising.

Ravenna District. Immediately north of Seattle to East 85th Street, between 20th Avenue N. E. and 32nd Avenue N. E., this area drains into the city. It would therefore seem impossible to organize it into a sewerage and drainage district under existing state laws, as proves to be the case relative to the Oaklake community.

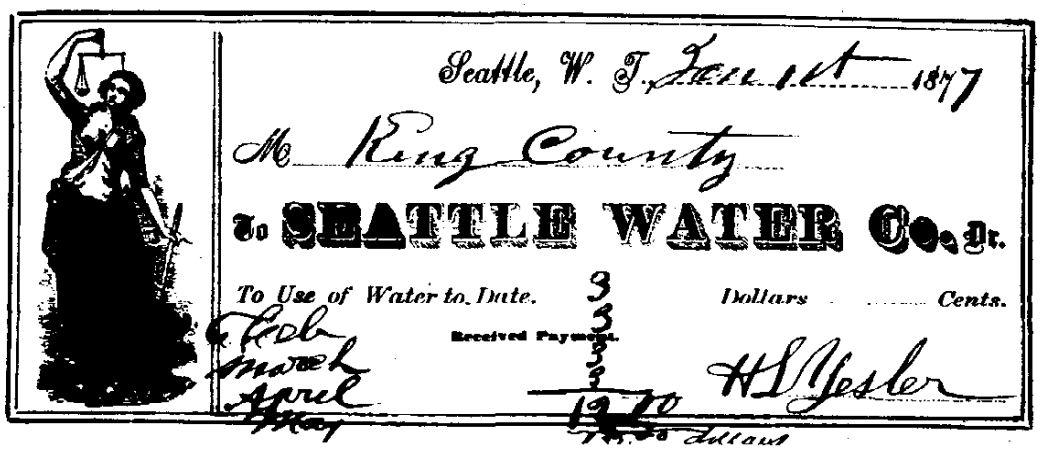
15th Avenue N. E. District. Extending north to about North 125th Street, between Meridian Avenue and Victory Way, a study of the problems involved has been undertaken by the county engineer from his funds, amounting to $173.92. Its natural drainage being towards Lake Washington at Mathew's Beach, it appears likely that at least a portion of this area will soon be established as a sewerage and drainage district.



PIPERS CANYON DISTRICT
View of Drainage Ditch to be Eliminated by Formation of Sewer and Drainage District

WATER DISTRICTS

The supply of water presented no problem to the early settlers, springs of pure sparkling water being everywhere. But as the city grew in population it became necessary to consider ways and means of conveying the water to the users. The first to do so was H. L. Yesler who in 1854 established the first water system in Seattle and King County. A legislative act in 1855 gave him and C. C. Terry the exclusive right to bring water in pipes into the city, permitting them the use of streets and alleys, and authorizing them to charge uniform rates for the service.



Yesler's water system drew its supply from a spring at a point on First Hill near 8th Avenue and Madison Street. The water was gathered in a tank built just north of Yesler Way between Third and Fourth Avenues and from there conducted to Yesler's Mill in an open V-shaped trough raised on poles, traffic passing underneath. This flume was extended in 1863 to Yesler's Wharf where those located thereon and boats tying up thereto were supplied with water. Eventually wooden pipe was used, consisting of six-foot sections of a twelve inch log with a two-inch hole bored by hand, the lengths being connected with wooden spigots. When the foundations for the L. C. Smith Building were excavated in 1913 a portion of this pipe with spigot was dug up, and found to be in a good state of preservation.

The second system was installed by Charles Plummer who obtained his supply from 6th Avenue South and Main Street. Then came Daniel Bagley, whose spring was located near 6th Avenue and University Street, and who served the territorial university and residents of that district. His was the first use of pipe, Yesler changing over much later. In 1876 A. A. Denny tapped a spring in the hill near 8th Avenue and Union Street, and brought water down to First Avenue then north to Pike Street to the coal wharf. By 1881 there were six systems in operation, when the Spring Hill Water Company (eventually to become the largest) received its franchise. At first getting its supply from springs on the west side of First Hill, five years later they were pumping water from Lake Washington into a reservoir at 13th Avenue South and Holgate Street. In 1882 the Union Water Company laid 4,000 feet of mains to serve the south slope of Queen Anne Hill from a source on the Mercer claim. By 1884 the Spring Hill concern bought out the James McNaught plant and was supplying the central district north of King Street from the waterfront to Fourth Avenue and the Lane and Dearborn Street areas. Yesler and Terry were serving the lower business district, Denny and McCoombs the Union Street neighborhood. The Union Water Company's territory covered North Seattle and

Lake Union including the southern portion of Queen Anne Hill. Harrington and Smith operating the William Coppin plant with works at Terry Avenue and Columbia Street, supplied the First Hill. By 1889 including all these, the Sturtevant system and the Georgetown Company, there were some thirty private systems functioning, of which number the Spring Hill Company had acquired many, including Yesler's.

The failure of the water supply during the fire of 1889, the growth of the city and the advantage of merging the smaller systems, all proved to be strong arguments for a city-owned plant. Therefore in 1890 the city purchased the Spring Hill Water Company, increasing the pumping capacity. Then followed the Union Water system in 1891 the Coppin plant, Dexter Horton & Company's in 1899. Ballard in 1907, Rainier Valley and Columbia in 1908. Georgetown and the Fairmont (West Seattle) in 1910, the last being the spring operated by the West Seattle Land and Improvement Company, acquired in 1911.

With the continued development of Seattle the existing sources of the city's water supply would soon prove insufficient. As early as 1888, Robert Moran then mayor, recommended the investigation of a gravity system, which was surveyed and reported on by John G. Scurry, City Engineer, with the suggestion that Rock Creek, a Cedar River tributary be tapped. Next year a bond issue of $1,000.000 was voted to build the system, but since the bonded indebtedness would exceed the debt limit, nothing could be done. In 1891 another report was rendered by Benezette Williams, a nationally known hydraulic engineer, who favored a Cedar River system to cost about $1,700 000. When R. H. Thomson became City Engineer in 1892 it was discovered that money to build the improvement could be raised by the sale of warrants, redeemable from water receipts, and that this would not increase the bonded indebtedness. After quite a struggle against private forces that wanted a franchise for themselves, the people voted in favor of city-owned works. Contract for Pipe Line No. 1 was let in 1899 at a cost of $1 250,000 and water delivered to the city in 1901. Pipe Line No. 2 costing $2 250,000 was let in 1908 and finished the next year. Pipe Line No. 3 from Ginger Creek to the city was let in 1922 at a total cost of $2,000,000. In addition to the pipe lines, dams were built, Lake Youngs converted into an impounding basin, tunnels constructed leading to it and control works erected, bringing the value of the entire City Water Plant, including the original purchase of the Spring Hill Water Company and others up to about $20,000,000.

As yet no legal provision was made for counties or residents thereof to organize for their water supply. Individuals used convenient springs or had to dig their own wells, in many instances a very costly proceeding. It was only in 1913 that a statute was passed authorizing the establishment of water districts on petition of 25 per cent of the landowners, and after a majority vote in favor thereof, at which time three water commissioners were chosen. The district's powers included the acquisition of land by purchase or condemnation, and the construction and maintenance of water works for all uses but irrigation. To finance the improvement the water commissioners were empowered to issue bonds by a majority vote, which was also necessary to levy special assessments for the formation of local improvement districts within their territory. However it took only 25 voters to petition for the enlargement of the district. In 1927, an enactment prevented the establishment of a district if 25 per cent of the residents were against it, and two years later dissolution under certain rules and regulations was provided for on petition of 25 per cent of the people. In 1933 legislation decreed that on a majority vote the water commissioners might convey the district's system to the city supplying them with water, provided the bonded and other indebtedness was paid. The original act of 1913 authorizing all uses, excepting irrigation, and one of the most necessary being that of fighting fire, a law was passed in 1937 permitting the purchase of equipment for that purpose by majority vote of the residents, and in 1939 another statute provided for a comprehensive plan including fire hydrants, with a vote to be taken as to the manner of financing construction and maintenance.

Pursuant to this legislation sixty-one districts have been formed in all parts of the county since 1916, of which number only thirty are still operating. Franchises have also been issued since 1910 to 123 private individuals and groups (nine during 1939), but only about fifty of them are still in existence, many having transferred their rights to the City of Seattle. The others have become inoperative through dissolution, disincorporation or insolvency. This heavy mortality is due to two things; first, excessive organizational and construction expense and second, indifferent or poor management. Considering each district and water company as an isolated unit, each has the full problem of financing, construction and operation, often without the benefit of technical experience. Only a few manage to be self-sustaining, while others are unable to pay interest on their bonds.

To bring about the economical operation of the water system in King County, it has been proposed that the assets and liabilities of the independent water districts be taken over by a "Metropolitan Water Commission" to be placed in charge of the Board of County Commissioners, as the head of county government. Regularly elected or appointed county officials would serve without additional pay as engineering, legal, financial and auditing advisors. Construction would follow engineering designed to take care of the future growth of the districts all according to a uniform and unified pattern. Operation under a central body would eliminate the unnecessary expense and duplication of work inherent in a multiplicity of offices, without injury to the service or to the consumer, and would result not only in lower, but in uniform rates throughout the county. Maintenance, if centralized, would be more efficient, and would also tend to lower costs, and thus create lower rates.

An exhaustive survey of all water districts was made, at a cost of $797.55 from the County Engineer's budget, and a report issued on August 22nd, 1939. Space does not permit details to be given in this publication excepting to mention that financing and construction costs were found in most instances to be excessive; that water district officials were in the main not experienced enough to provide honest, efficient and proper management; that the per capita cost for the installation of equipment to secure the water, before using even a drop of it, has been approximately $375.00; that much of the physical equipment, often originally inadequate, has deteriorated rapidly and is in poor condition; that the bonded and warrant indebtedness has reached a staggering figure, with about 20 per cent of it in default. The conclusion reached in this survey is "that a plan must be evolved looking toward their (the districts) simplification and unification under a central authority, such plan to be incorporated in a carefully drawn bill for the consideration of the state legislature at its next regular session." It is further stated that "the proposal would involve the county taking over the water districts, together with their assets and liabilities, with the view of saving costly legal and engineering expense, which services the county might well perform as part of its routine; reducing interest under a refinancing plan, paring operating costs under central control, and achieving a long-range development impossible under existing statutes."

EXPENDITURES—COUNTY-ORGANIZED WATER DISTRICTS

(1916-1939 Inclusive)

County disbursements since 1916 include salaries, construction, maintenance, and interest on bonds and warrants. W. P. A. contributions in labor are not shown in this table, but are estimated below.

District No.	Years	Amount
1	1916-1939	$ 18,367.33
2	1916-1938	14,806.90
3	1917-1939	194,466.68
4	1917-1939	164,611.49
5	1920-1921	371.18
7	1920-1939	929,644.25
8	1921-1922	2,028.50
9	1921-1939	44,821.31
13	1925-1939	120,975.94
14	1924-1939	74,459.95
15	1925-1939	29,347.06
17	1925-1939	78,180.23
19	1926-1939	36,840.95
20	1926-1939	406,418.78
22	1926-1939	36,530.50
23	1927-1939	62,696.64
24	1926-1936	8,411.60
25	1927-1939	66,388.37
26	1927-1929	362.90
28	1929-1931	617.00
34	1932-1939	2,578.22
35	1931-1939	48,823.43
38	1931-1939	84,170.77
40	1938-1939	124.19
42	1932-1939	203,863.46
43	1932-1939	43,954.85
45	1932-1939	19,215.63
49	1934-1939	143,561.44
52	1936-1939	4,082.45
53	1938-1939	22,631.50
54	1938-1939	37,929.60
56	1939	460.16
57	1939	384.77
58	1939	402.02
59	1939	7,500.00
61	1939	800.33
General	1916-1933	13,124.20
TOTAL EXPENDITURES		$2,923,954.58
AVERAGE PER DISTRICT PER YEAR		$ 6,790.15

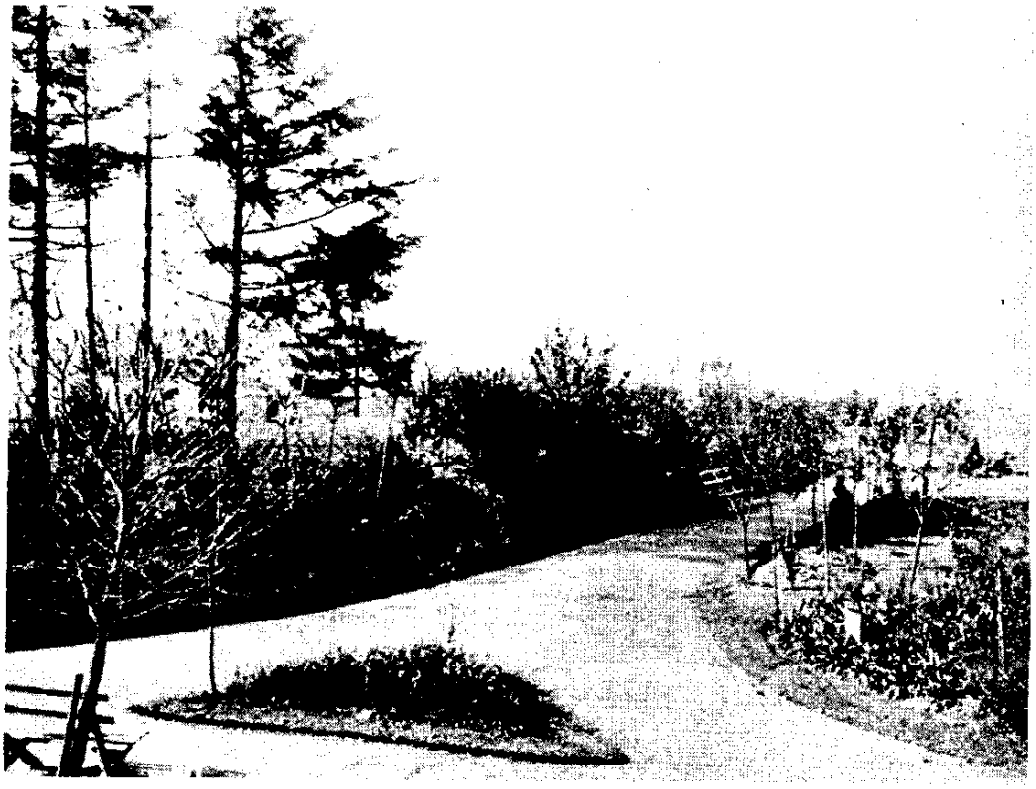
ESTIMATED EXPENDITURES
ORGANIZED AND PRIVATELY-OPERATED WATER DISTRICTS

(1910-1939 Inclusive)

County-Organized Districts, as above	$ 2,923,954.58
W. P. A. Labor, 1933-1939 Inclusive (Estimated)	13,047,796.08
Privately-Operated Districts (Estimated)	2,440,005.59
GRAND TOTAL	$18,411,756.25

PUBLIC WORKS—PARKS—PLAYGROUNDS

The first parks in King County were in Seattle, and the first park in Seattle had its beginnings in a cemetery. For in 1864 Mr. and Mrs. D. T. Denny donated to the city five acres to be used as a burial ground. In 1876 removal was made to another cemetery, the ground reverting to the Dennys who eight years later again presented the tract to the city calling it Denny Park. In 1887 Guy C. Phinney laid out 286 acres as Woodland Park, which the city purchased for $100,000.00, and in the same year George Kinnear donated a 14-acre tract on Queen Anne Hill known as Kinnear Park. By 1887 the city was also developing forty acres on a ridge half way between the bay and Lake Washington. First known as Lake View Park, then City Park, it was in 1901 called Volunteer Park at the suggestion of J. Willis Sayre, in honor of the First Washington Infantry Volunteers recently returned from the Philippines. Next in the development of the city park system in the 1890's were those areas promoted by the street car companies at the end of their lines, to increase the passenger load. Among these were Madison, Leschi, and Madrona Parks, all later acquired by the city. Ravenna in 1900 was Seattle's eighth park. Others since added by donations from J. M. Frink, Charles Cowan, Ferdinand Schmitz, etc. bring the total to about fifty parks administered by a Board of Park Commissioners.



DENNY PARK IN 1902

In the county, development of parks was never considered to be essential, probably because of the large uninhabited areas that existed. However, the authorities came to the realization of the dangers inherent in a situation where children had to play in vacant lots and enacted a statute in 1937 giving counties authority to acquire by purchase, gift, dedication or donation, camping, scenic-view and recreational sites and parks for public use and enjoyment. Counties were also empowered to make the necessary rules and regulations for the use of such areas, and to provide for their care, maintenance and upkeep.

Pursuant thereto Resolution No. 6725 was passed on January 10th, 1938, providing in the county budget for a public works, parks and playgrounds department. On the same day the county commissioners placed this newly created division under the supervision of the county engineer, and named as park superintendent Archie Phelps for South District No. 2 and H. B. Hartzell for North District No. 3. These officials are the agents of County Commissioners Jack Taylor and Tom Smith, respectively, in their dealings with communities wishing to secure parks or other recreational facilities.

In carrying out the provisions of this act, King County has devoted its resources to the improvement of recreational centers and community buildings to provide supervised play areas and facilities for children, as well as meeting rooms and assembly halls for community functions and activities. No special effort is being made in the development of scenic areas, because the national park service and the state park department have provided on a large scale for the preservation of such scenic spots.

In proceeding with the development of these recreational areas, cooperation with the communities to be benefitted, the W. P. A. and the county engineer's office, results in a project along these lines:

1. Rural centers of population scarcely are found to have the necessary funds to provide community facilities, but generally there are available either as public domain or as a donation from private citizens or groups, land which could be utilized for this purpose. The first step, therefore, has been for the community through its appointed park committee, to deed the available site to the county for park and recreational purposes. Before proceeding with the next step, however, the county engineer's office should check such deeds against the assessor's plats, since the county does not have title insurance or abstracts on all such property. It also seems advisable that the property should be mapped and staked out in the field. Moreover, some parks will require a topographic survey to establish proper grades for drainage and ground elevation for improvements.

2. Next is the establishment of the parks, by resolution of the county commissioners, each bearing an official county number; after which comes the preparation of the project by the public works, parks and playgrounds department. This is generally worked out in cooperation with the community park committee, and then submitted to the federal authorities for approval.

3. The financing of the project is next to be considered. The county assists to the extent of approximately twenty-five per cent, the balance coming from the W. P. A. which furnishes the necessary labor from the unemployed in the community to be benefitted.

4. When approved by the W. P. A., surveys are made and plans prepared by licensed architects and engineers in the office of the county engineer. On approval construction is carried on jointly between the park commissioners and the county engineer's staff, the W. P. A. furnishing the labor, materials being supplied by the county or by donation from community groups. In the beginning some confusion existed in the matter of construction, due to the fact that plans could not be prepared as fast as the jobs were started by the W. P. A. This difficulty is now being eliminated and no new projects are started without having complete plans and details available. These plans should be religiously followed under competent supervision, and if any changes are necessary, they should be approved by the district supervisor, and the engineer, who should see that the plans are corrected. This essential will become more obvious in later years when repairs and alterations to buildings are necessary.

5. After construction comes the maintenance and supervision of the community center. This is a function of the public works, parks and playgrounds department, with the recommendations of, and on consultation with the local park committee.

Headquarters for the South District have been established at White Center and for the North District at Kirkland. The South District erected a sawmill at Cumberland and the North District at North Bend. Both moves make for better supervision and greater economy in construction costs. In fact the operation of the sawmills, while necessitating a small cash outlay results in King County as sponsors, receiving credit from the W. P. A. at current prices for the lumber produced, and makes such projects more attractive to the W. P. A. authorities.

OPERATIONS—SOUTH DISTRICT NO. 2

Work continued on many of the park areas during 1939. the most important of which are here described, the balance being listed in the table below. Engineering and other technical assistance entailed an expenditure of $910.22 from county engineer's funds.

Des Moines Park No. 1. Established in 1937, the grounds were cleared in 1938. and this year the erection of the field house was the maior improvement. Of log construction and a concrete basement, it measures 50x135 feet with a large sized gymnasium floor, stage and kitchen. By the end of the year it was about 80 per cent complete, and by midsummer of 1940 it is expected to be turned over to the community. The five acres of land surrounding the clubhouse have been landscaped, the tennis courts, baseball field and a large grandstand have been built. Expenditures to the end of 1939 from county funds have been $10,928.62 for which the county has received a sponsors credit of $24,300.00 due to lumber and other equipment supplied. The W. P. A. has furnished labor in the amount of $52,800.00 to date.

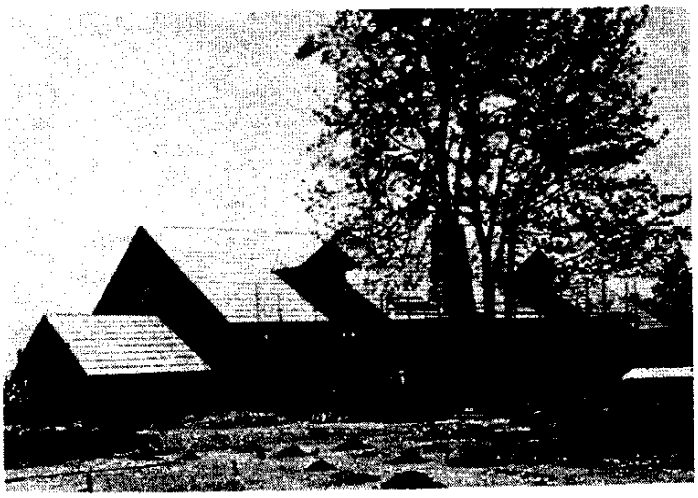
White Center Park No. 4. In 1938 only about 20 per cent of the land was cleared. This was finished in 1939, and the field house at the end of the year was nearly 40 per cent complete. It is of half log construction, with a full concrete basement 50x135 feet and includes a large gymnasium floor, stage and kitchen. A baseball field with grandstand is nearing completion. Other improvements scheduled for 1940 are the installation of playground equipment, tennis courts, outdoor kitchens and comfort stations. Total cost to date from county funds amounts to $7,796.61 for which sponsors credit was received for $20,300.00. W. P. A. contribution in labor came to $43,000.00.

Enumclaw Park No. 13. Although officially established by Resolution No. 7190 dated January 9th, 1939, grubbing and grading was, nevertheless, completed in 1938. During 1939 work proceeded on the fieldhouse, which is approximately 50 per cent complete, is of half log construction, with full concrete basement, 50x135 feet, and has a large gymnasium floor, a stage and kitchen. A football field and grandstand are ready for use, and a baseball field with a grandstand is under construction. In addition a nine-hole golf course is being built, as well as one of the finest youth camps in the country. Still to be erected are fifty log cabins, and a dam and power plant. Two swimming pools, a double tennis court and other playfield equipment are yet to be installed. Cost to date from county funds is $23,461.06, amounting to a sponsor's credit of $68,600.00, with the W. P. A. expenditure in labor running to $120,000.00.

No work was done in 1939 on the Farmers Picnic Grounds, Bryn Mawr, Muckleshoot Indian Reservation and Arbor Heights. A review of the projects on which something was accomplished during the past year follows:

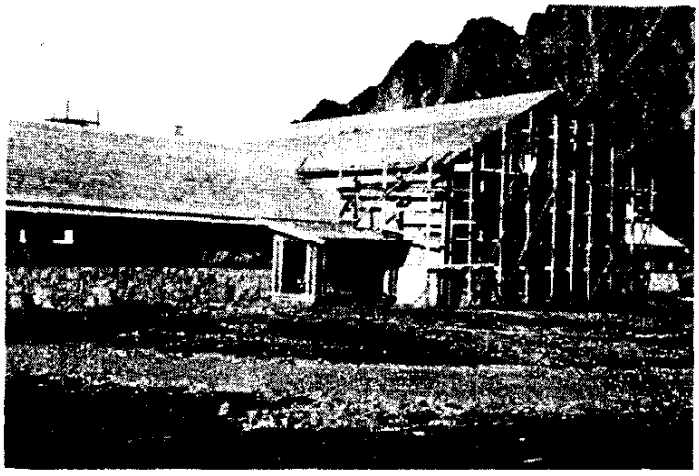
Loation and Work Done	King County Expense For 1939	King County Cost to 12-31-39	W.P.A. Cost to 12-31-39	Total Cost to 12-31-39
Des Moines Park No. 1— See above	$ 6,045.97	$ 10,928.62	$ 52,800.00	$ 63,728.62
Enumclaw Park No. 13— See above	17,604.96	23,461.06	120,000.00	143,461.06
White Center Park No. 4— See above	7,796.61	7,796.61	43,000.00	50,796.61
Vashon Island Park No. 2— Upkeep and general repair	499.13	553.17	.....	553.17
Lake Burien Park No. 3— Began grading, drainage, baseball field and blea chers	41.07	41.07	2,000.00	2,041.07
Southern Heights— Remodel old building	677.58	677.58	.....	677.58
Riverton Heights— Remodel old building	877.72	915.20	.....	915.20
Ravensdale Park No. 5— Clearing and grading	.....	.....	2,000.00	2,000.00
TOTALS	$ 33,543.04	$ 44,373.31	$219,800.00	$264,173.31

ENUMCLAW CLUBHOUSE
Almost Completed

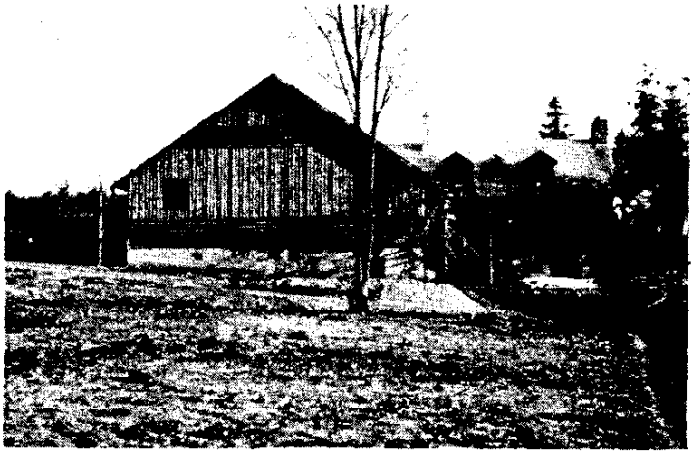


DES MOINES CLUBHOUSE
Practically completed

OPERATIONS—NORTH DISTRICT NO. 3



NORTH BEND
CLUBHOUSE
In Progress



HIGHLAND PARK
CLUBHOUSE
Nearing Completion

PRESTON
CLUBHOUSE
Completed project

OPERATIONS—NORTH DISTRICT NO. 3

No work was done in 1939 on Fall City Recreational Center No. 14, Medina Park No. 18 (which has been abandoned), Haller Lake Park (in abeyance on account of an injunction), Golden View Beach, Bellevue Camp Site, Grotto Park, Ravenna Park, Aurora Park (established in 1939 at Aurora Avenue and 92nd Street), Tolt Park, Houghton Park, and Lago Vista Center (abandoned). Accomplished during the year, including purchase of locations was the following, from park funds. From the county engineer's budget, engineering and other technical assistance was rendered to the extent of $1,592.24.

Location and Work Done	King County Expense For 1939	King County Cost to 12-31-39	W.P.A. Cost to 12-31-39	Total Cost to 12-31-39
Meydenbauer No. 6, Roanoke No. 7, Cyde No. 9—Completed as one project in 1938. Small cleanup in 1939	$ 13.46	$ 1,790.25	$ 8,950.00	$ 10,740.25
Lake City Beach No. 8— Completed in 1938, cleanup 1939	91.70	537.22	7,607.00	8,144.22
Haller Lake Playfield No. 10— Completed in 1938	.....	108.15	4,313.00	4,421.15
Preston Park No. 12— Clubhouse, tennis courts, and landscaping in 1939	3,469.65	4,591.81	18,799.00	23,390.81
Fall City Park No. 14— Expended in 1938	.....	382.99	.....	382.99
North Bend Park No. 11— Clubhouse and swimming pool 75 per cent completed	10,038.77	14,716.63	31,841.00	46,557.63
Highland Park No. 15— Clubhouse 80 per cent completed	5,928.24	5,978.24	26,466.00	32,444.24
Kirkland Park No. 16— Grading, landscaping and clubhouse 35 per cent complete	11,014.91	11,102.41	29,000.00	40,102.41
Hamlin Park No. 17— Superseding project for completion in 1940	963.00	1,677.52	17,257.00	18,934.52
Chesterfield Park— Expended in 1938, 85 per cent complete	.....	297.02	2,477.00	2,774.02
Victory Heights Park— Completed in 1939	1,854.89	3,313.15	20,334.00	23,647.15
Haller Lake Park— Expended in 1938	.....	407.16	.....	407.16
Grotto Park— Expended in 1938	.....	204.20	.....	204.20
Skykomish Park— Superseding project for completion in 1940	799.59	1,182.58	.....	1,182.58
Factoria Park— 20 per cent complete	698.49	735.99	.....	735.99
Ravenna Park— Property secured	105.59	105.59	.....	105.59
Aurora Park— Property secured	336.27	336.27	.....	336.27
Tolt Park— Property secured 1938	.....	45.00	.....	45.00
Houghton Park— Property secured	37.43	37.43	.....	37.43
Duvall Park— Work continued in 1939	411.46	585.39	.....	585.39
Golden View Beach— Little work in 1939	60.20	60.20	.....	60.20
TOTALS	$ 35,823.65	$ 48,195.20	$167,044.00	$215.239.20

ACCOUNTING

A central accounting system for the road districts under Chief Accountant Sam Emmanuel is maintained in the county road engineer s office, where record is kept of all expenditures made from district funds, and from county road, river improvement, parks and playgrounds and fire patrol funds. Monthly reports of activities are submitted to the road district commissioners, and the county road engineer.

Under the direction of Chief Clerk Harold Laufer, besides personnel records and administrative routine, all accounting is carried on in connection with disbursements in the county road engineers office from the funds in the engineers and wharves budgets, and from the county road fund.

GENERAL ACCOUNTING

Disbursements of the two districts are carefully analyzed, vouchers for payment prepared, and entries made as to classification of projects and type of expenditure. This requires the use of some forty-one different forms throughout the county. Purchase of equipment, materials and supplies, is made on requisition and carefully checked before the payment of any invoice is authorized. Equipment is appraised yearly for the guidance of the commissioners as to disposals and replacements, detail of which is shown elsewhere in this report. A Stores Account is maintained for recording materials and supplies. Expenditures from funds administered by the chief accountant totaled $1,555,331.02, analyzed in various accounts as shown.

ANALYSIS OF COUNTY ROAD FUND—1939

CLASSIFICATION	District No. 2		District No. 3		Total	
	Amount	Percent	Amount	Percent	Amount	Percent
Construction	$191,547.88	29.37	$250,430.13	40.77	$ 441,978.01	34.90
Maintenance	401,913.46	61.63	297,279.77	48.40	699,193.23	55.21
Administration	41,268.33	6.33	39,174.54	6.38	80,442.87	6.35
Bond Redemption	17,417.09	2.67	27,372.20	4.45	44,789.29	3.54
TOTALS	$652,146.76	100%	$614,256.64	100%	$1,266,403.40	100%

STORES ACCOUNT—1939

	District No. 2		District No. 3	
	Amount	Total	Amount	Total
Inventory January 1, 1939	$ 19,766.70		$ 17,677.57	
Purchases and Labor, 1939	36,597.64	$ 56,364.34	67,495.22	$ 85,172.79
Withdrawals:				
County Road	34,348.04		64,329.83	
River Improvement	1,492.18		1,670.28	
Fire Patrol	60.52		358.85	
Parks and Playgrounds	740.73		3,728.59	
Sales to outsiders	.....	36,643.47	7,447.20	77,534.75
Book Inventory, December 31, 1939		$ 19,722.87		$ 7,638.04
Both Districts		$27,360.91		

ANALYSIS OF ALL EXENDITURES FROM DISTRICT FUNDS—1939

CLASSIFICATION	COUNTY ROAD FUND		RIVER IMPROVEMENT		PUBLIC WORKS, PARKS AND PLAYGROUNDS		FIRE PATROL		TOTALS	
	District 2	District 3	District 2	District 3	District 2	District 3	District 2	District 3	District 2	District 3
Clerical	$ 17,014.14	$ 16,696.09	$ 3,174.56	$ 2,869.00	$ 1,899.67	$ 1,723.35	$	$	$ 22,088.37	$ 21,288.44
Labor	218,916.14	157,204.69	29,931.81	51,640.93	5,982.14	3,334.18	5,196.56	5,192.02	260,026.65	217,371.82
Supervision	43,828.52	39,820.99	8,728.30	5,082.20	5,215.25	6,780.00	.....	.....	57,772.57	51,683.19
Materials	126,012.01	211,436.71	7,064.33	1,523.39	12,740.69	10,311.96	.....	.....	145,817.03	223,272.06
Supplies	68,769.96	50,006.70	10,130.41	13,047.52	8,185.56	7,116.38	704.19	755.62	87,790.12	70,926.22
Equipment Rental	10,583.48	13,379.28	4,563.80	9,152.70	4,257.70	1,092.36	701.06	315.00	20,106.04	23,939.34
Equipment Repair	112,429.35	74,191.35	13,870.40	11,476.52	408.17	3,446.90	.....	448.19	126,707.92	89,562.96
Equipment Purchase	4,850.55	3,636.42	10,295.14	1,284.14	2,117.59	1,942.15	3,318.36	3,311.75	20,581.64	10,174.46
Ind. Ins. and Medical Aid	3,997.71	2,909.68	524.24	743.27	154.79	153.87	91.68	71.24	4,768.42	3,878.06
Location Engineering	12,144.73	8,903.26	.....	991.67	.....	.....	.....	.....	12,144.73	9,894.93
Construction Engineering	1,829.33	7,164.91	.....	.....	.....	1,792.18	.....	.....	1,829.33	8,957.09
Right of Way	14,353.75	1,534.36	.....	.....	425.00	3,647.23	.....	.....	14,778.75	5,181.59
Bond Redemption	17,417.09	27,372.20	.....	.....	.....	.....	.....	.....	17,417.09	27,372.20
TOTALS	$652,146.76	$614,256.64	$ 88,283.49	$ 97,811.34	$ 41,386.56	$ 41,340.56	$ 10,011.85	$ 10,093.82	$791,828.66	$763,502.36
TOTALS BOTH DISTRICTS	$1,266,403.40		$186,094.83		$82,727.12		$20,105.67		$1,555,331.02	

OFFICE ACCOUNTING

The operating expense of the county road engineer's office includes the cost of engineering, supervision and inspection of construction projects financed from the county road fund; construction and maintenance of county wharves; engineering in relation to flood control operations and parks and playgrounds; supervision of W. P. A. projects; etc.

ENGINEERS OFFICE EXPENDITURES
(1894 to 1939 Inclusive)

These figures are taken from the county auditor's yearly reports. Prior to 1894 no particular record was kept of fees and expenses of the surveyor. Between 1894 and 1900 the surveyor and his aides worked on a per diem basis, and had no fixed budget or salary. Up to 1910 while that official's fees (later his salary) and his office expenses were consolidated in one account all costs relating to preliminary road surveys were recorded separately. It was only beginning in 1910 that the county engineer operated on a budget to which was charged all items of engineering. The amounts tabulated herein were compiled from all sources in the auditor's reports which were related to the present functions and duties of the county engineers office.

Year	Amount	Year	Amount	Year	Amount
1894	$ 2,310.09	1911	53,911.48	1928	138,543.72
1895	2,901.19	1912	56,786.06	1929	138,045.66
1896	5,073.54	1913	54,282.98	1930	144,188.75
1897	3,800.89	1914	68,273.07	1931	138,556.90
1898	5,970.40	1915	60,757.83	1932	126,824.23
1899	5,097.27	1916	67,771.64	1933	100,363.25
1900	5,291.30	1917	94,608.92	1934	84,940.36
1901	6,462.10	1918	96,264.30	1935	103,680.50
1902	6,391.13	1919	120,818.02	1936	104,063.25
1903	14,672.67	1920	141,081.97	1937	130,318.05
1904	24,491.38	1921	119,353.20	1938	102,512.98
1905	26,074.78	1922	103,747.80	1939	102,517.05
1906	29,951.41	1923	109,015.23		
1907	36,223.63	1924	103,194.20	TOTAL	$3,316,221.68
1908	44,639.26	1925	113,140.56		
1909	46,238.55	1926	118,534.16	Yearly Average	$ 69,087.95
1910	39,758.59	1927	114,777.38		

AVERAGE FOR PAST TEN YEARS.....$113,796.53

ANALYSIS OF EXPENDITURES—ENGINEER'S OFFICE—1939
(Source of Funds and Classifications of Expenditures)

Classification	Engineer's Office	County Wharves	W.P.A. Sponsor's	County Road	River Imp.	Totals
Salaries	$ 82,169.50	$	$ 10,647.63	$ 66,931.91	$ 991.67	$160,740.71
Ind. Ins.-Med. Aid	770.67	241.95	108.98	639.57	10.70	1,771.87
Sundry	5,558.33	.....	.....	.....	.....	5,558.33
Postage	226.00	.....	.....	.....	.....	226.00
Transportation	4,098.41	347.15	1,399.33	305.73	.....	6,150.62
Motor Vehicle Oper. & Maint.	6,913.00	896.07	.....	.....	.....	7,809.07
Materials-Supplies	.....	18,853.48	843.44	.....	.....	19,696.92
Wharf Labor	.....	21,297.22	.....	.....	.....	21,297.22
Testing Lab. Equip	377.83	.....	.....	.....	.....	377.83
Capital Outlay	1,997.53	999.85	.....	.....	.....	2,997.38
Tools & Equip.	533.43	.....	.....	.....	.....	533.43
Wharf Insurance	.....	154.34	.....	.....	.....	154.34
TOTALS—1939	*$102,644.70	$ 42,790.06	$ 12,999.38	$ 67,877.21	$ 1,002.37	$227,313.72
TOTALS—1938	$102,512.98	$ 38,788.18	$ 20,023.59	$ 66,751.08	$	$228,075.83

*Total in county auditor's report is $102,517.05, the difference being due to lapse of time between the two offices.

ANALYSIS OF EXPENDITURES—NON-ROAD PROJECTS—ENGINEER'S OFFICE—1939

(Including all Engineer's Funds, Except County Road and Wharf)

NATURE OF PROJECT	FIELD EXPENDITURES			OFFICE EXPENDITURES			GRAND TOTAL
	Salaries & Ind. Ins.	Transportation & Supplies	Total	Salaries & Ind. Ins.	Transportation & Supplies	Total	
ENGINEERING							
Flood Control							
Snoqualmie River	$ 1,116.56	$ 160.63	$ 1,277.19	$ 458.93	$ 10.43	$ 469.36	$ 1,746.55
Raging River	2,226.01	203.75	2,429.76	65.36	11.04	76.40	2,506.16
Tolt River	1,859.14	158.27	2.017.41	473.10	10.08	483.18	2,500.59
Sammamish River	64.48	7.48	71.96	100.37	8.73	109.10	181.06
Issaquah Creek (East Fork)	356.25	59.55	415.80	88.23	.87	89.10	304.90
Drainage							
Cottage Lake	198.72	18.78	217.50	152.40	2.16	154.56	372.06
General	179.75	4.95	184.70	88.62	16.06	104.68	289.38
Sewer and Drainage Districts							
North Beach No. 2	1,772.58	85.00	1,857.58	1,277.28	49.14	1,326.42	3,184.00
Richmond Beach No. 3	312.01	27.53	339.54	1,183.97	30.39	1,214.36	1,553.90
Oak Lake	.....	.....	.....	216.01	3.58	219.59	219.59
General	.....	.....	.....	391.77	59.52	451.29	451.29
W. P. A. Projects							
Boeing Field	1,981.42	104.97	2.086.39	1,000.55	618.36	1,818.91	3,905.30
Triangulation Survey	525,00	1,870.58	2,395.58	31.48	843.94	875.42	3,271.00
Parks and Plygrounds							
District No. 2	390.23	44.54	434.77	359.59	115.86	475.45	910.22
District No. 3	640.64	65.77	706.41	755.39	130.44	885.83	1,592.24
General							
Docks and Wharves	361.61	83.10	444.71	53.04	8.22	61.26	505.97
Plats	308.61	35.48	344.09	761.08	88.32	849.40	1 193.49
General Map Work	.....	.....	.....	2,303.97	954.56	3,258.53	3,258.53
Water Districts	.....	.....	.....	641.17	156.38	797.55	797.55
Miscellaneous	208.17	14.89	223.06	111.02	57.87	168.89	391.95
TOTAL ENGINEERING	$ 12,501.18	$ 2,945.27	$ 15,446.45	$ 10,513.33	$ 3,375.95	$ 13,889.28	$ 29,335.73
TOTAL ADMINISTRATION	.....	.....	.....	46,326.64	5,,760.54	52,087.18	52,087.18
TOTAL COST NON-ROAD PROJECTS	$ 12,501.18	$ 2,945.27	$ 15.446.45	$ 56,839.97	$ 9,136.49	$ 65,976.46	$ 81,422.91